

図1 FIG. 1

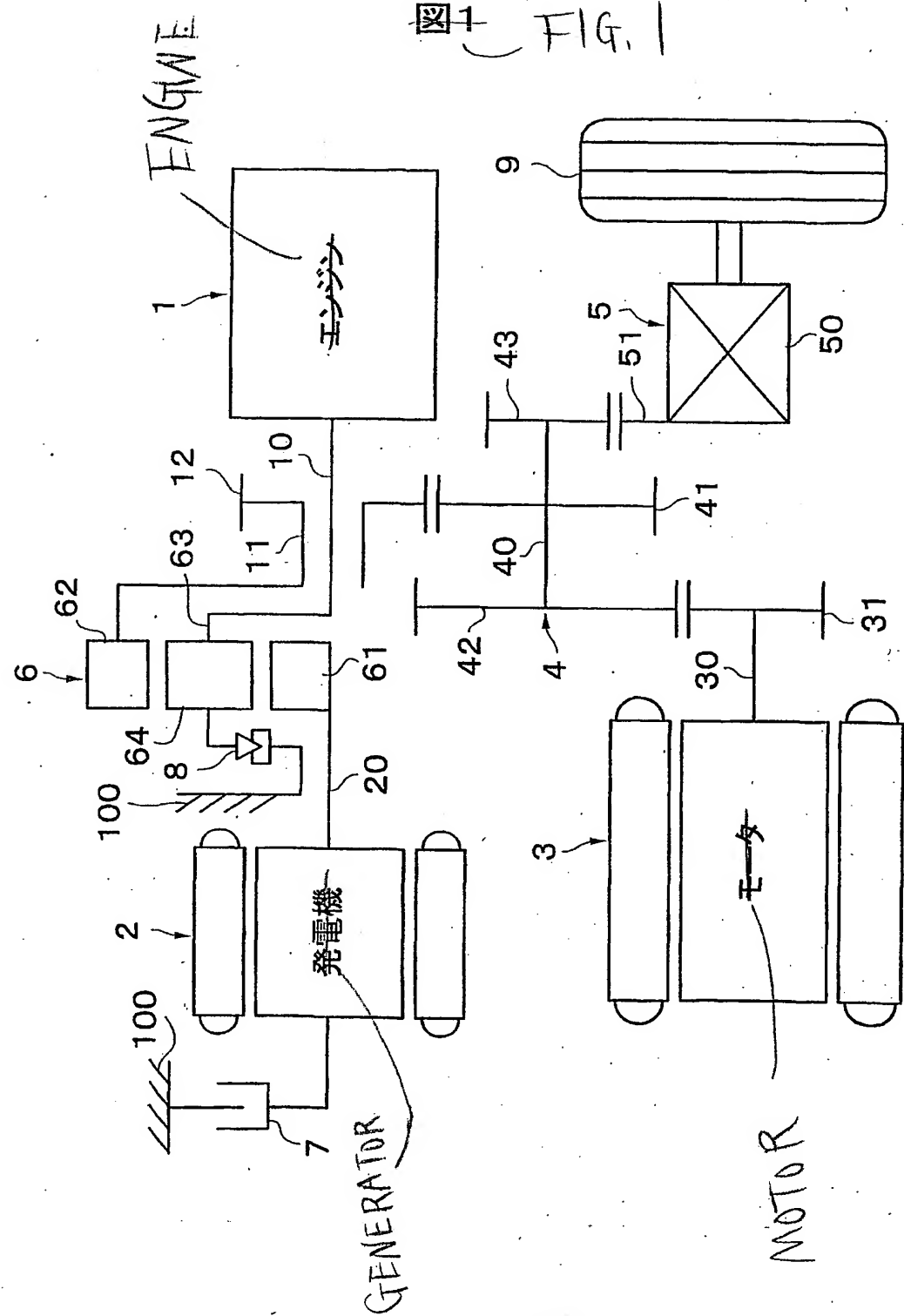


FIG. 2

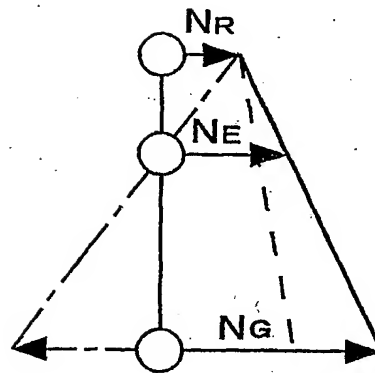
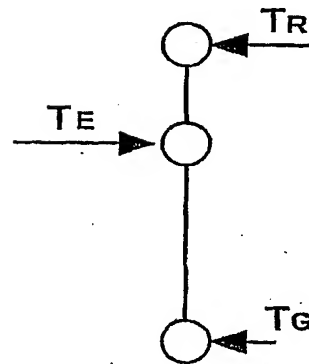


FIG. 3



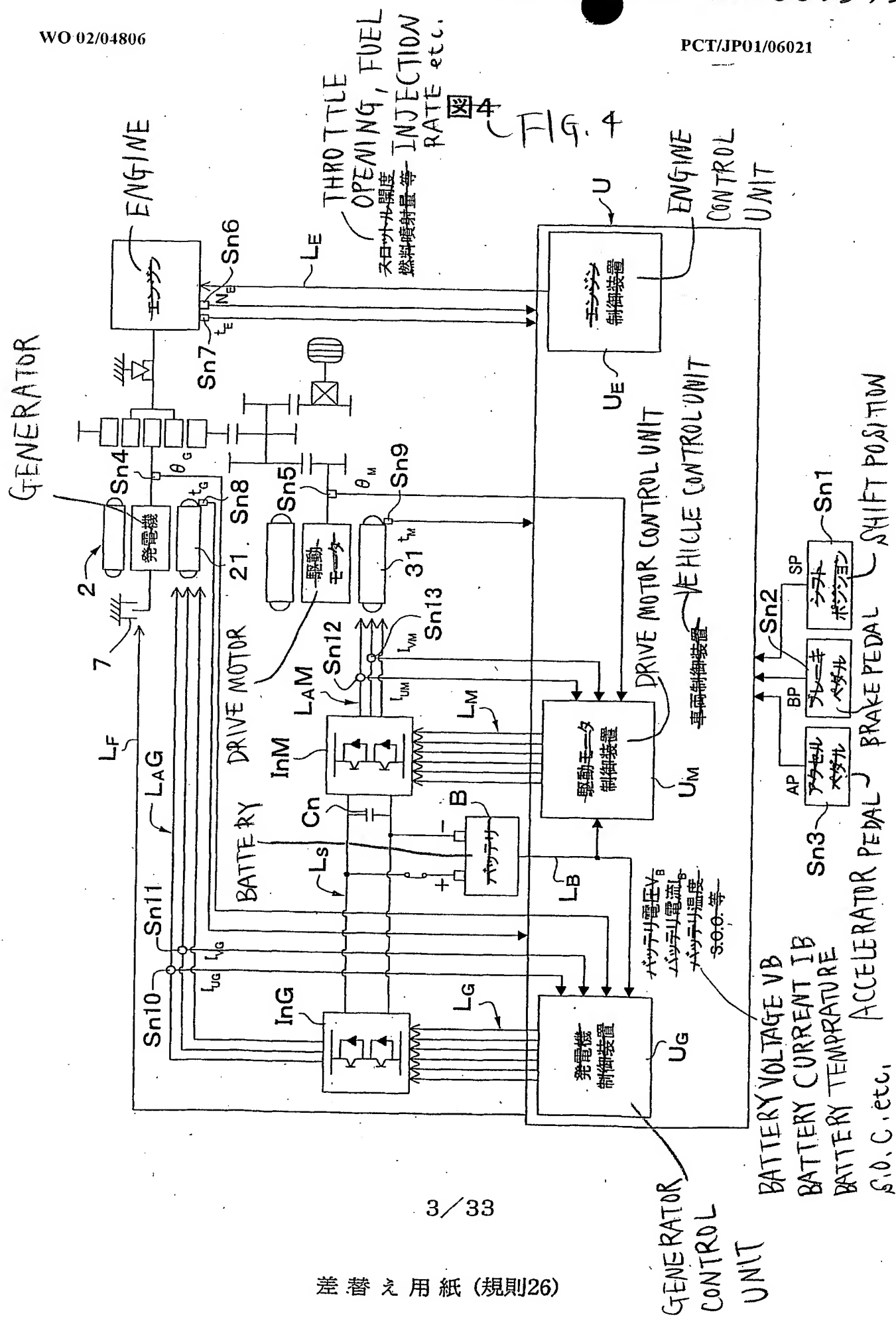
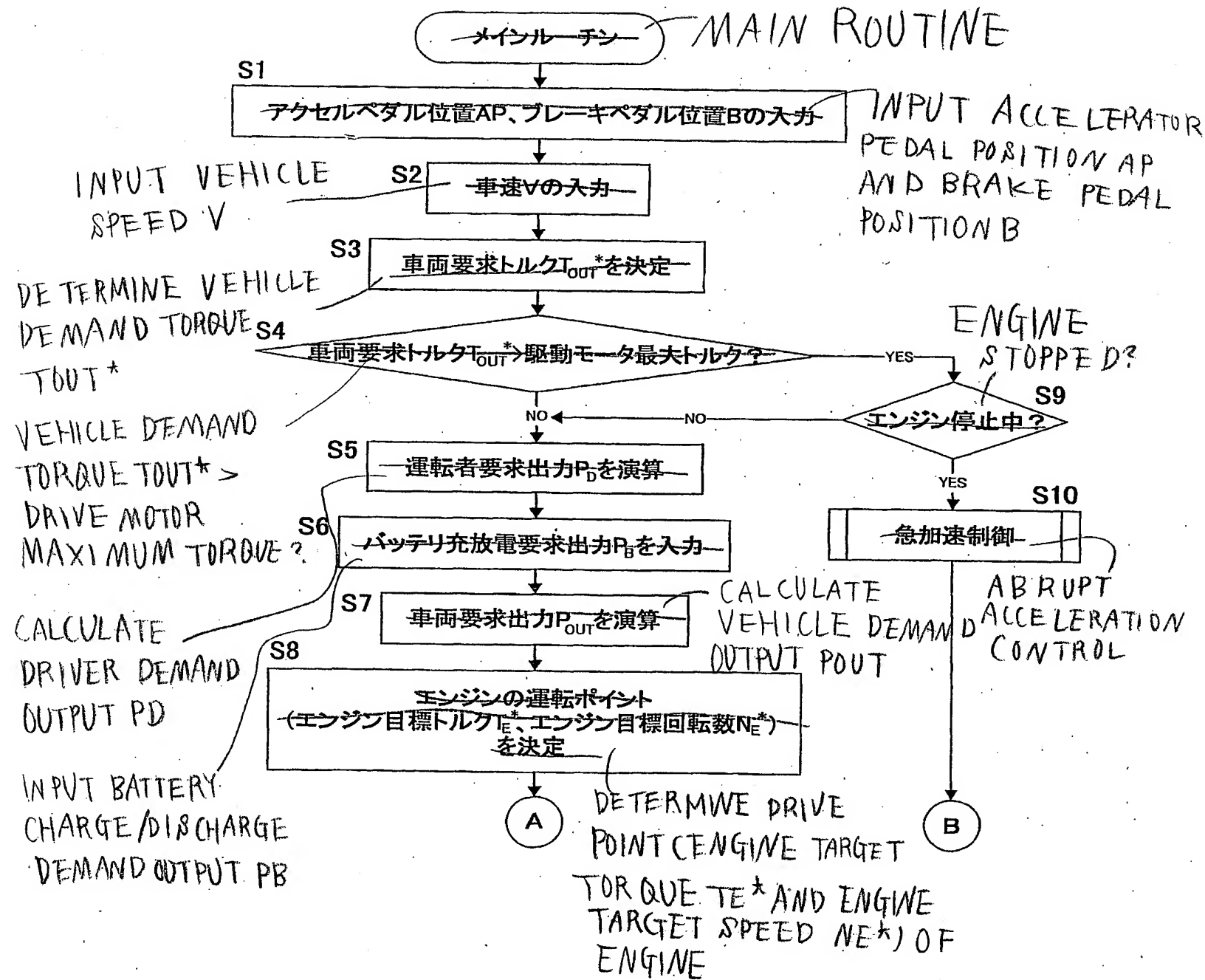


図5  
FIG. 5

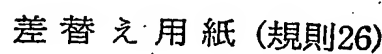


図7  
FIG. 7

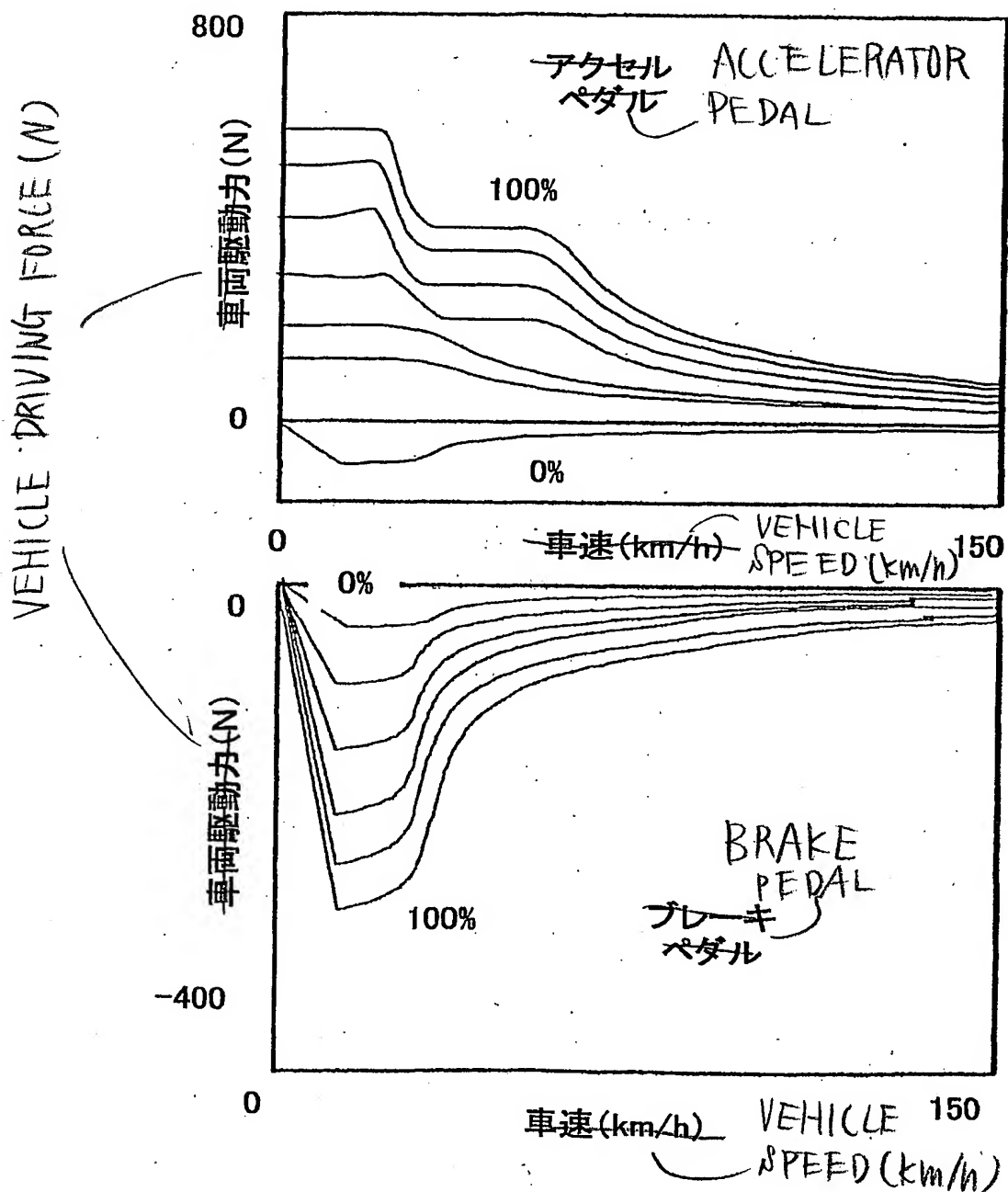


図8  
FIG. 8

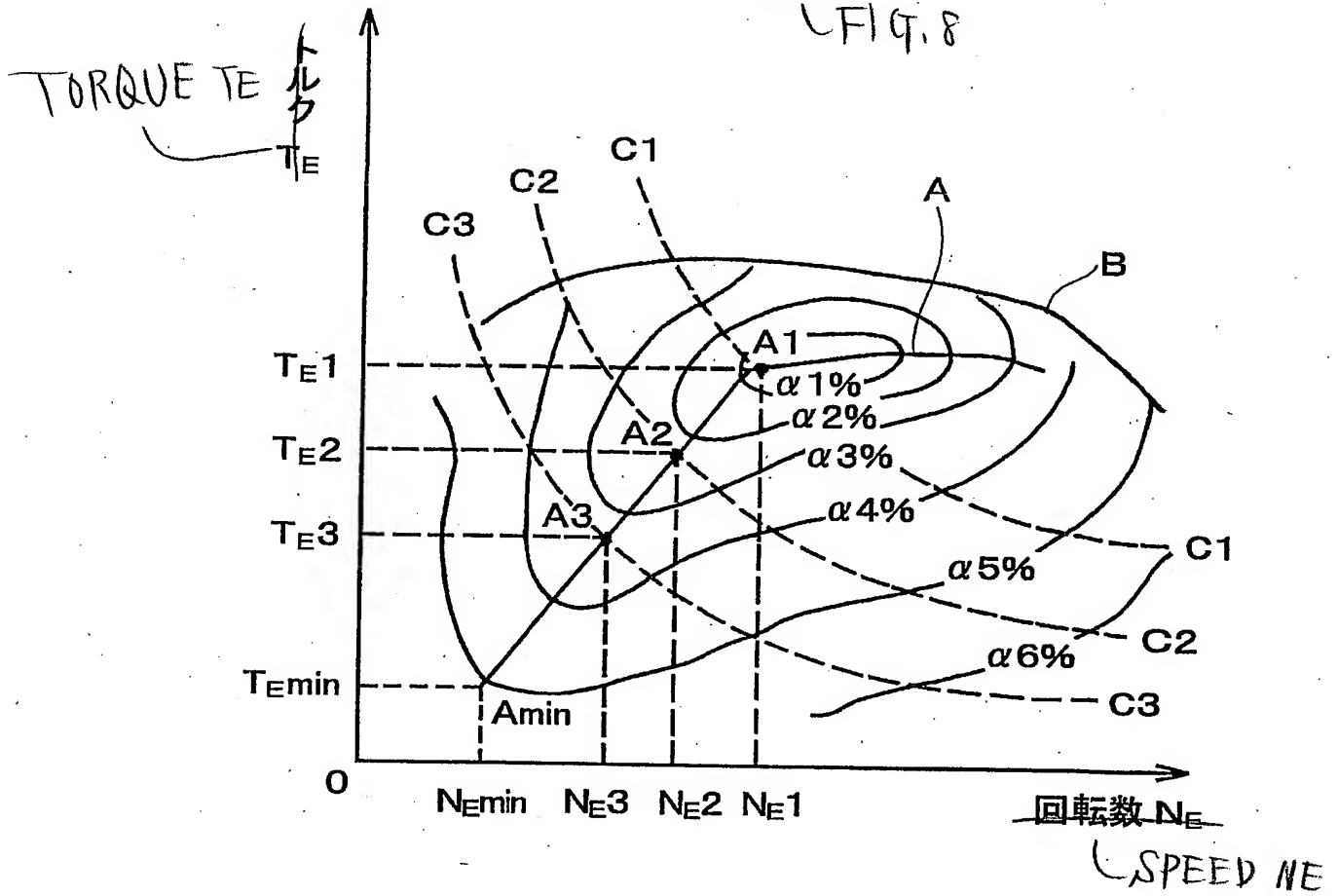
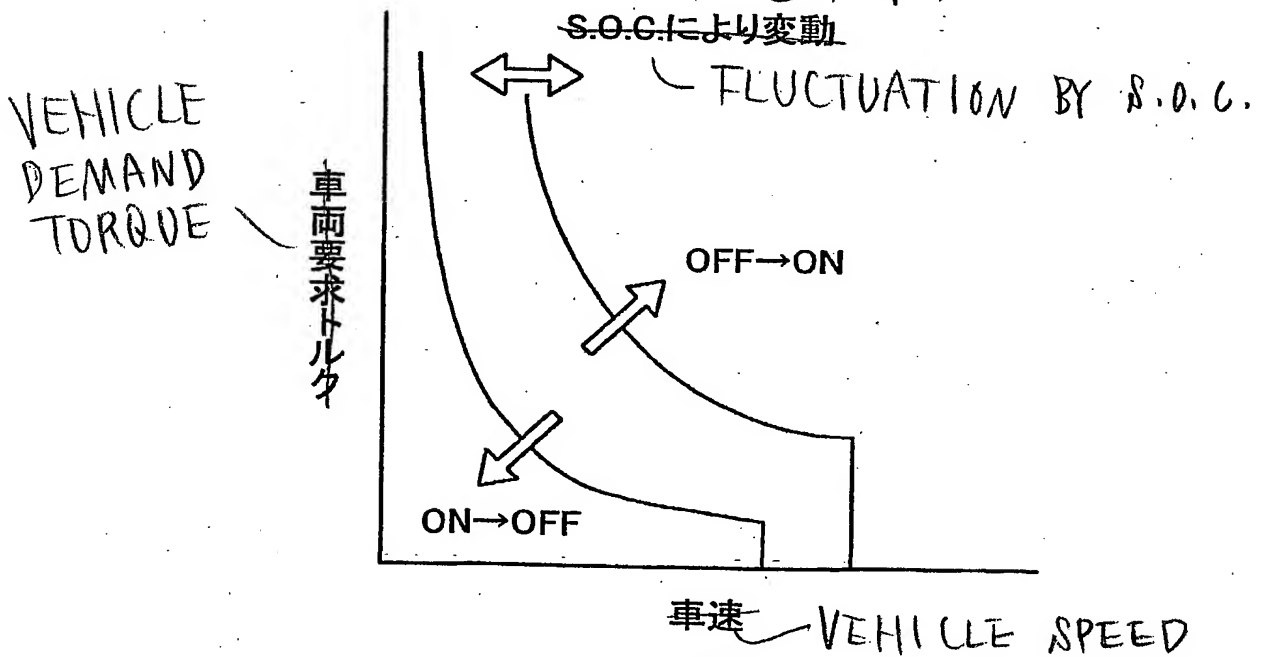


図9  
FIG. 9



ABRUPT ACCELERATION  
CONTROL ROUTINE

図10-  
FIG. 10

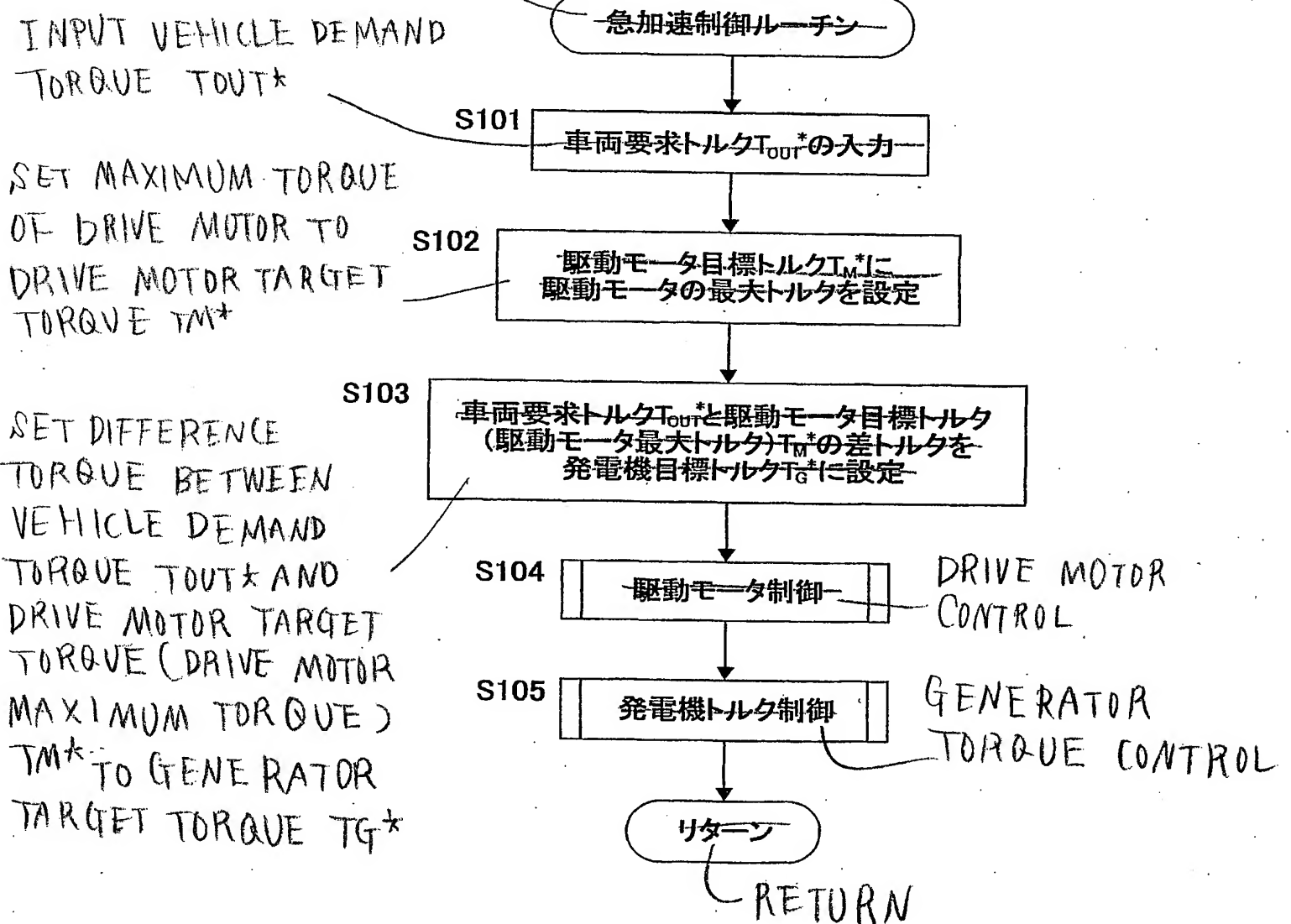




図11  
FIG. 11

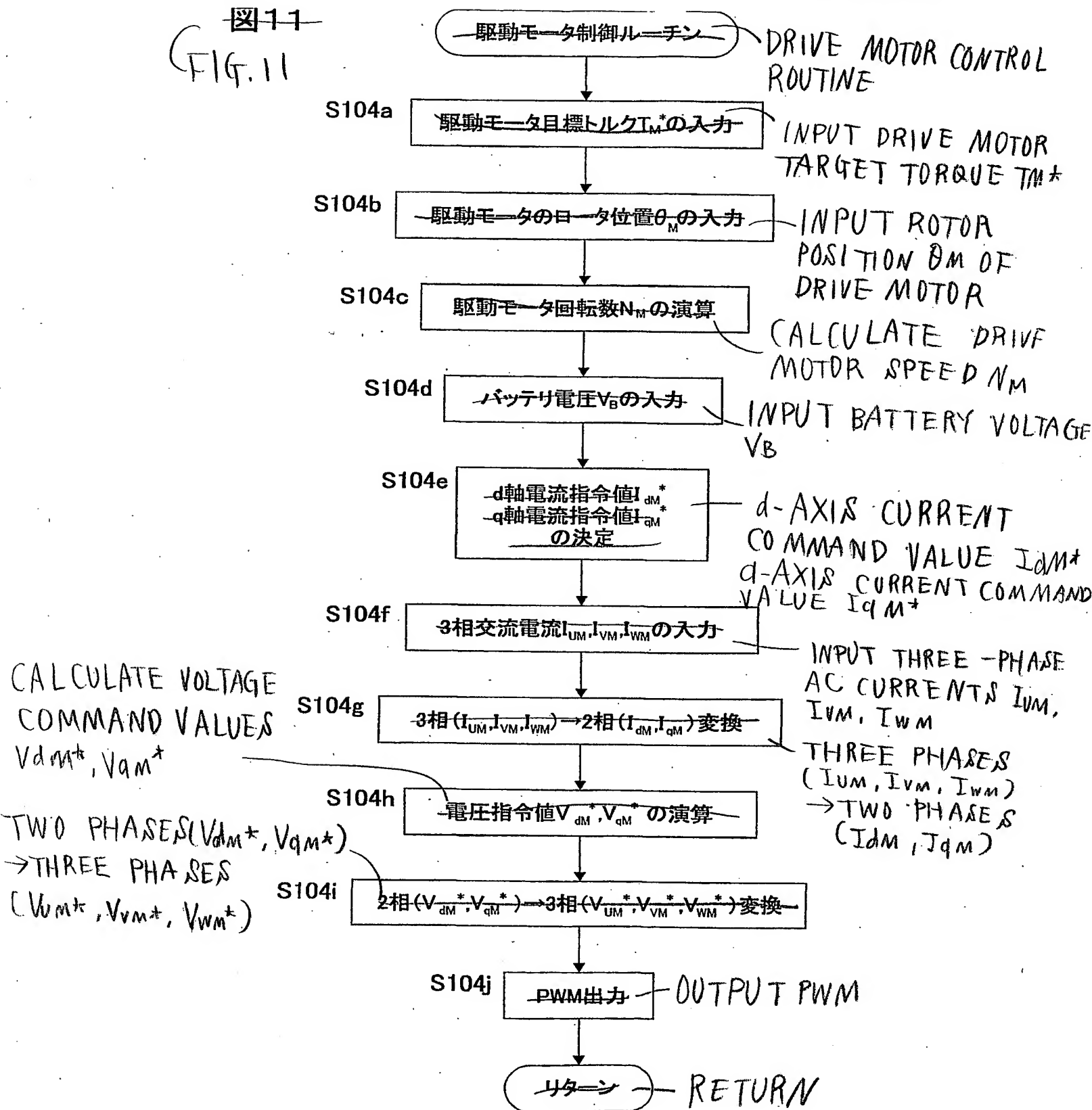


図12  
Fig. 12

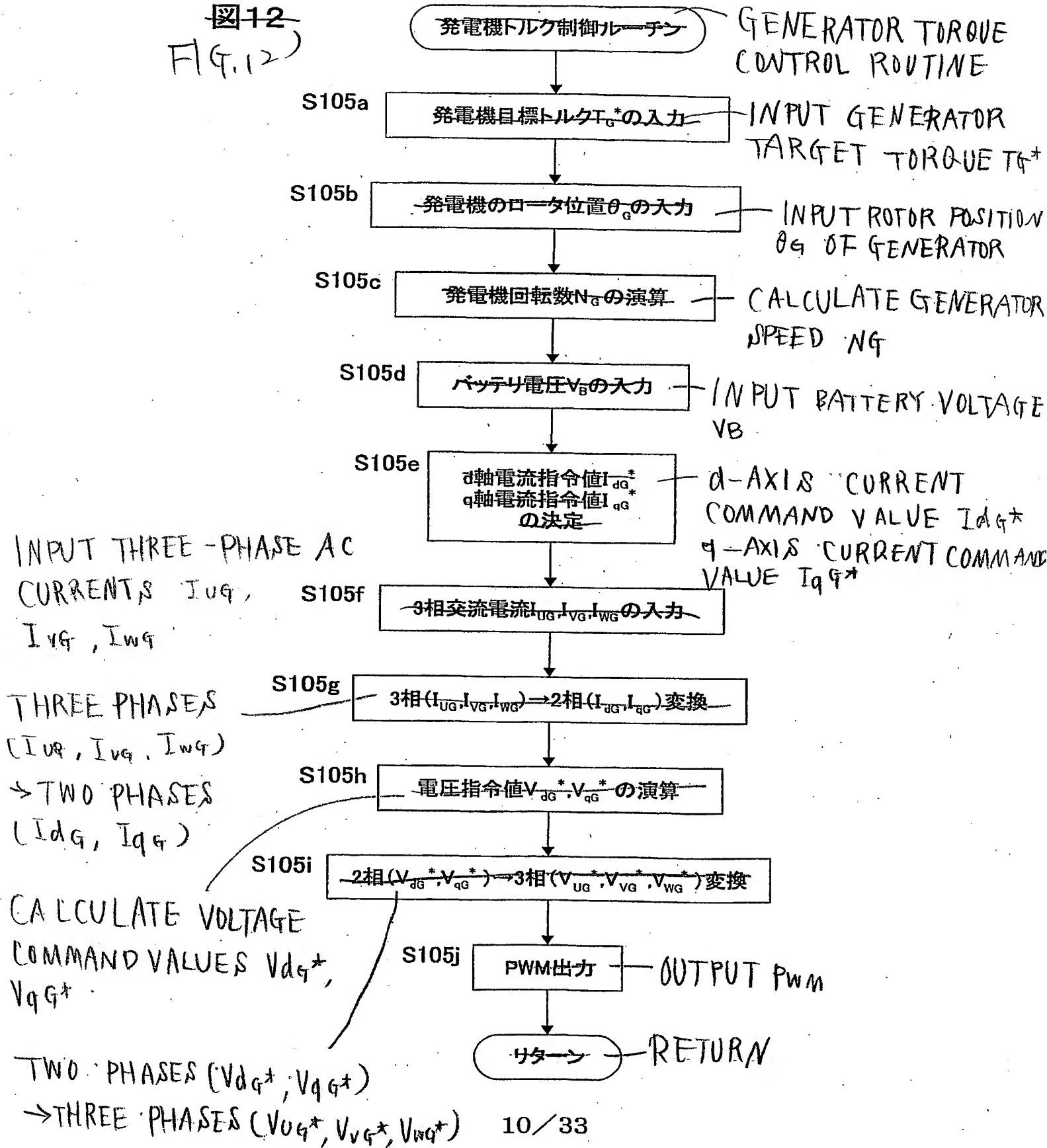
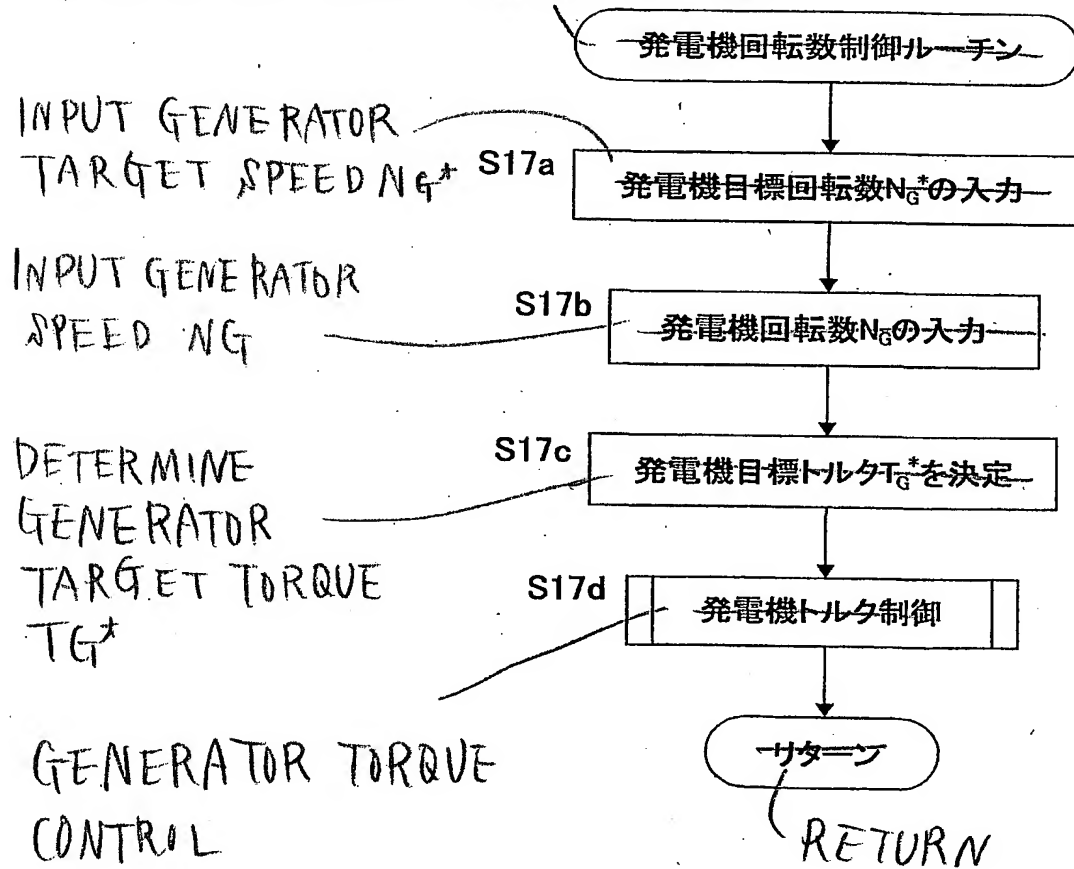


図13

FIG. 13

## GENERATOR SPEED CONTROL ROUTINE



# GENERATOR BRAKE ON CONTROL ROUTINE

PCT/JP01/06021

図14

FIG. 14

発電機ブレーキON制御ルーチン

SET GENERATOR  
TARGET SPEED  $N_G^*$   
WITH 0rpm

S22a 発電機目標回転数  $N_G^*$  に 0rpm を設定

S22b 発電機回転数制御

S22c プラネタリを介して出力される  
駆動軸トルク  $T_{R \rightarrow OUT}$  を推定

S22d 駆動モータ目標トルク  $T_M^*$  に  
 $=T_{R \rightarrow OUT}$  を設定

S22e 駆動モータ制御

S22f 発電機回転数  $N_G$  < 第2の所定回転数?

SET DRIVE  
MOTOR TARGET  
TORQUE  $T_M^*$   
WITH  $-T_{R \rightarrow OUT}$

DRIVE MOTOR  
CONTROL

YES

S22g 発電機ブレーキON

S22h プラネタリを介して出力される  
駆動軸トルク  $T_{R \rightarrow OUT}$  を推定

S22i 駆動モータ目標トルク  $T_M^*$  に  
 $=T_{R \rightarrow OUT}$  を設定

S22j 駆動モータ制御

S22k 発電機ブレーキON状態で所定時間経過?

SET DRIVE MOTOR  
CONTROL

DRIVE MOTOR  
CONTROL

PREDETERMINED  
TIME ELAPSED  
IN GENERATOR  
BRAKE ON?

YES

S22l 発電機へのSW停止

リターン

SW STOP OF GENERATOR

RETURN

# GENERATOR BRAKE CONTROL ROUTINE

PCT/JP01/06021

図15

発電機ブレーキOFF制御ルーチン

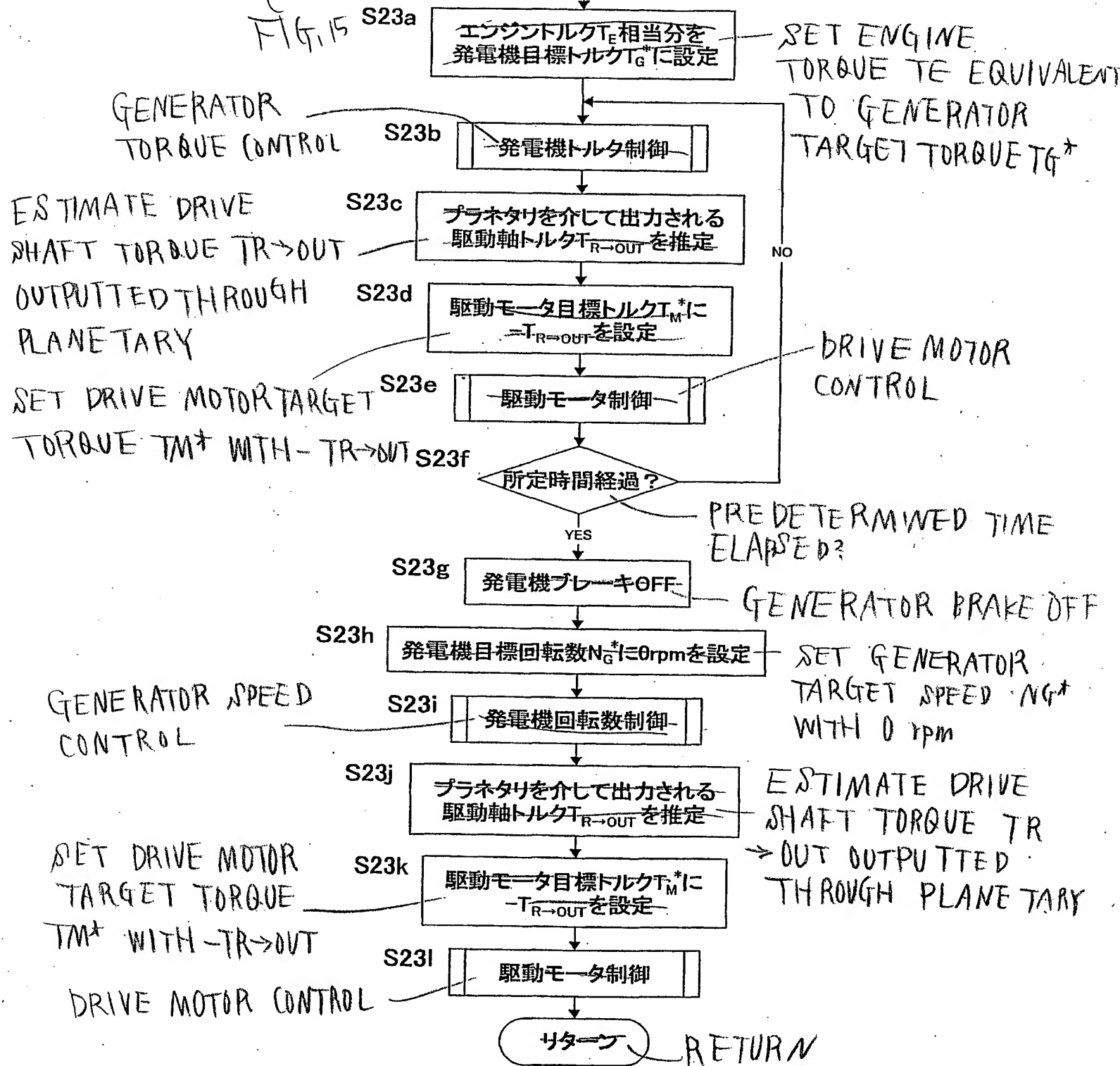
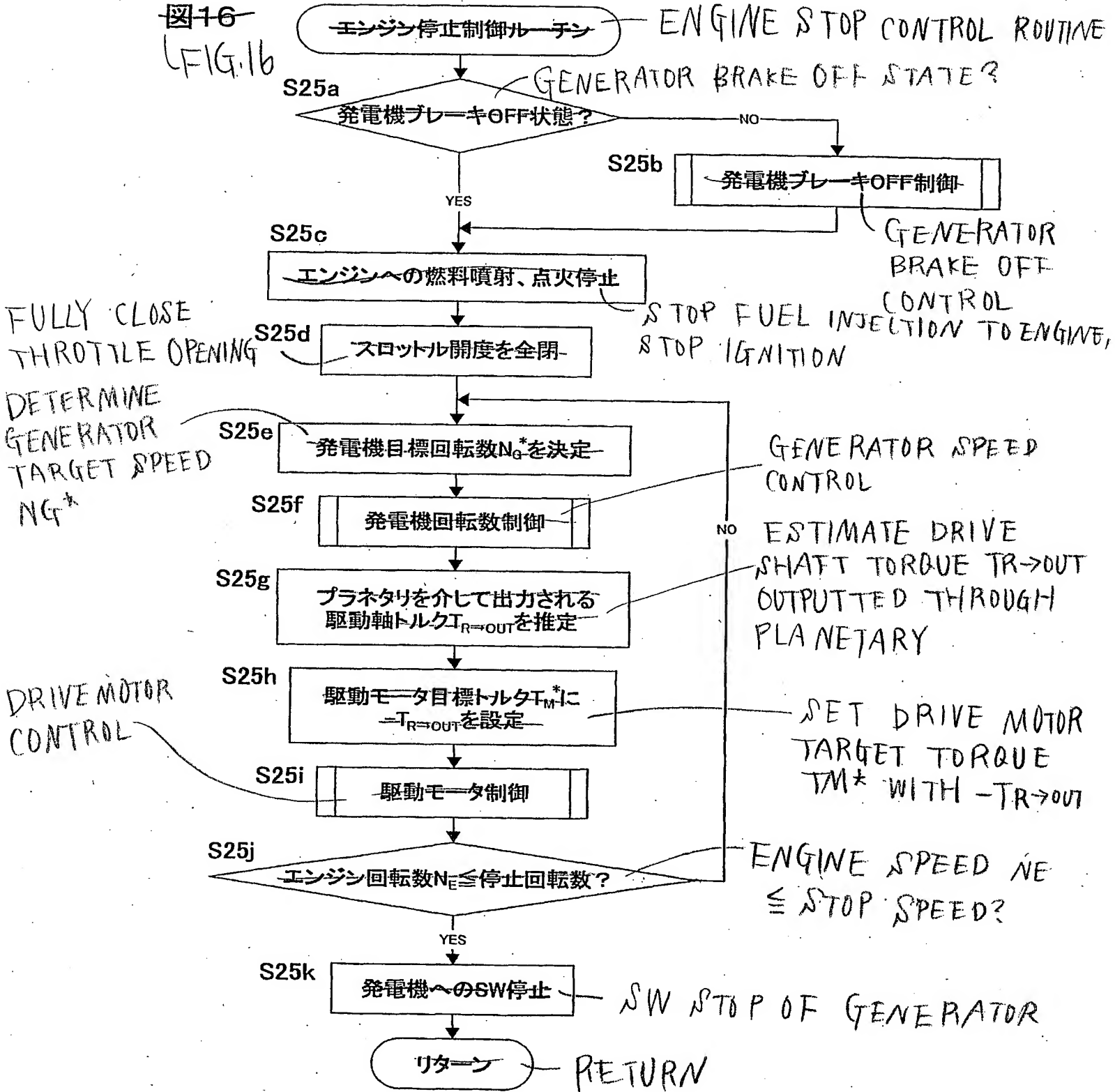


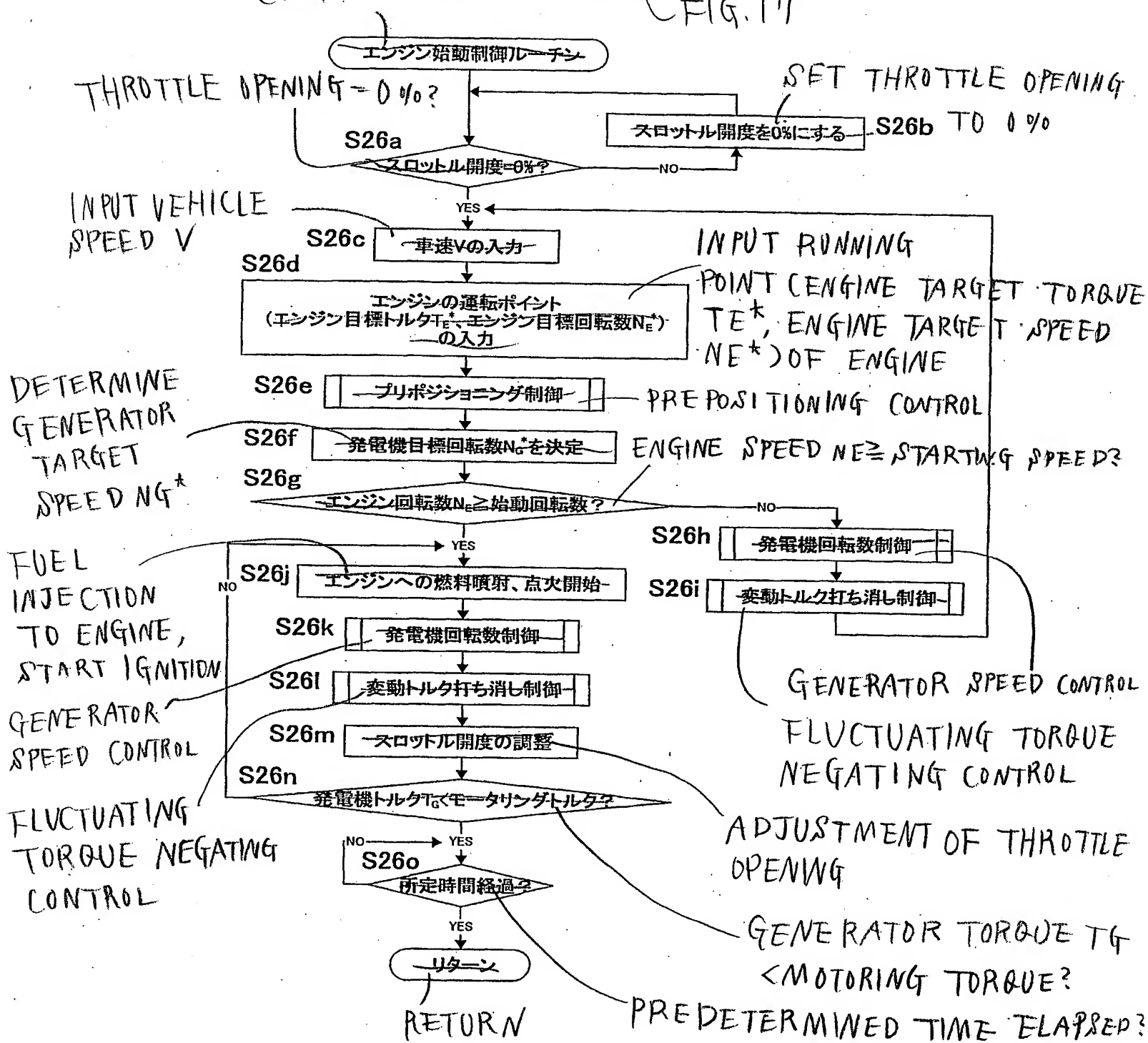
図16  
FIG. 16

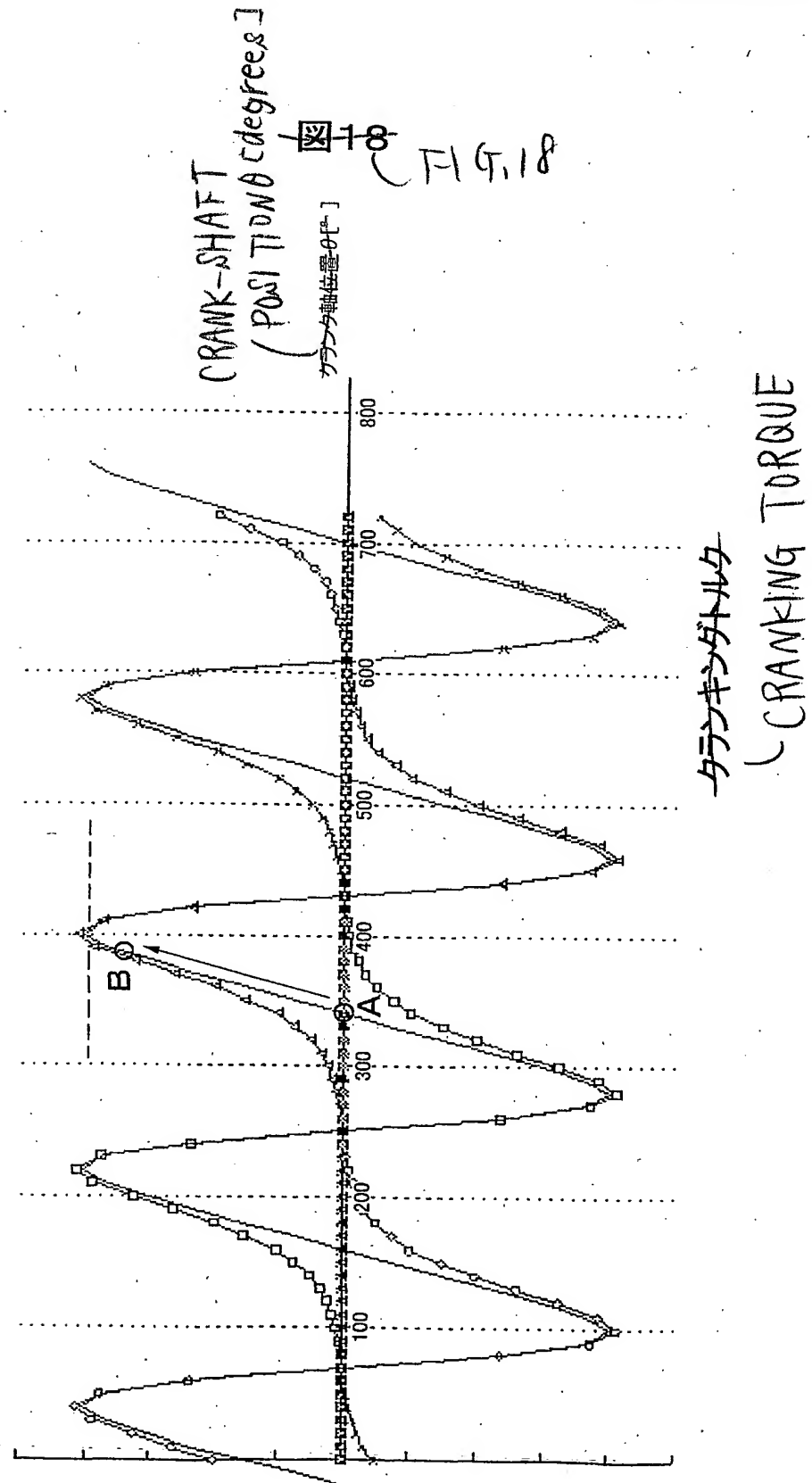


ENGINE START  
CONTROL ROUTINE

図17

FIG. 17







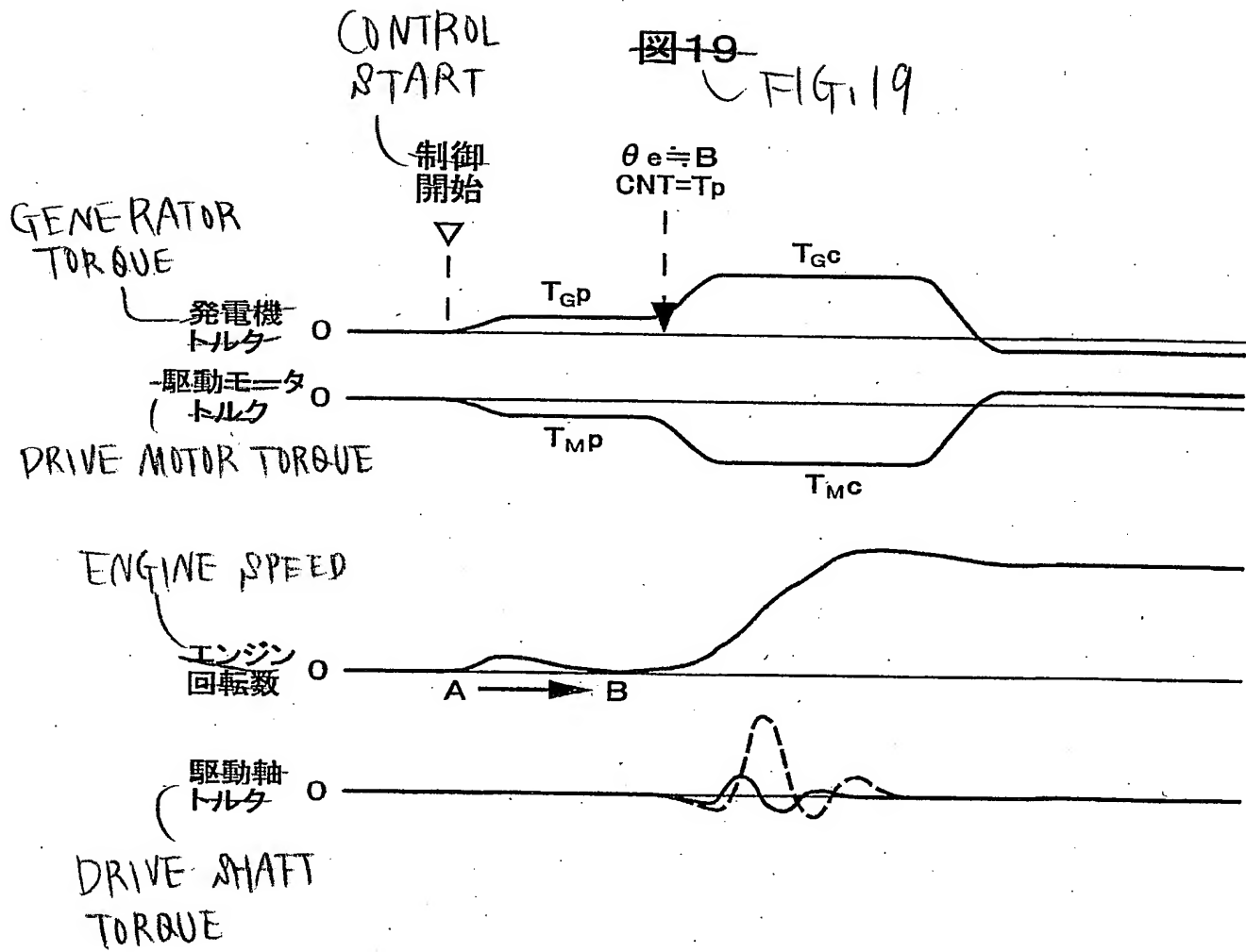


図20

Fig. 20

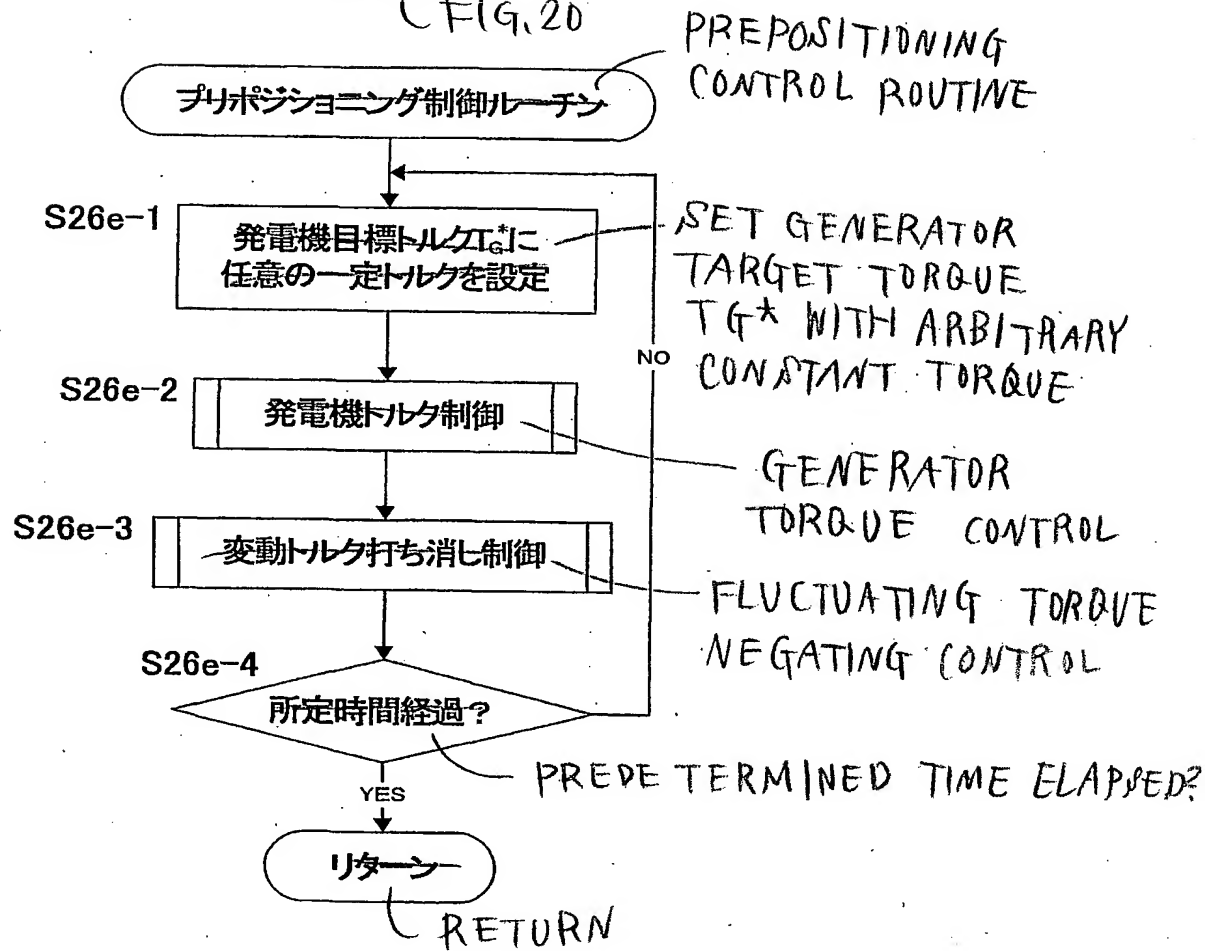


図21 FIG. 21

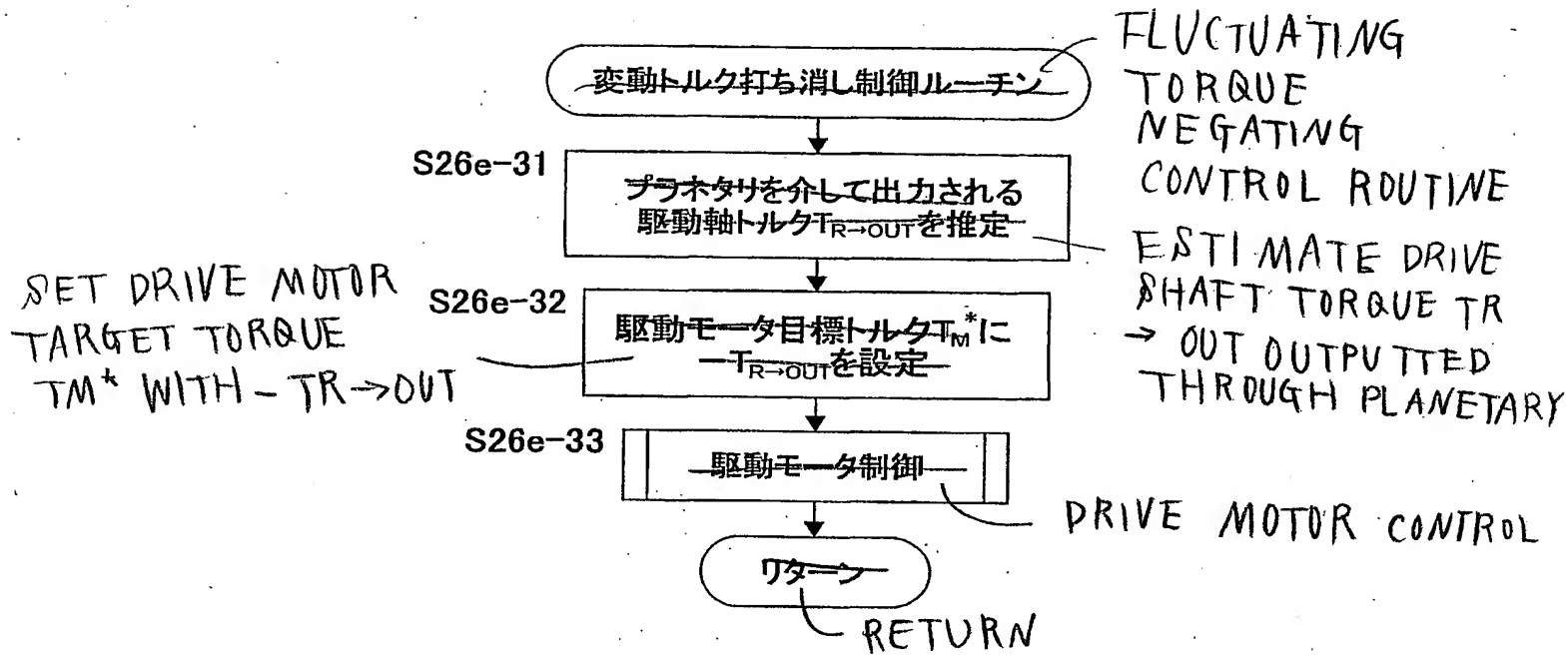


図22 FIG. 22

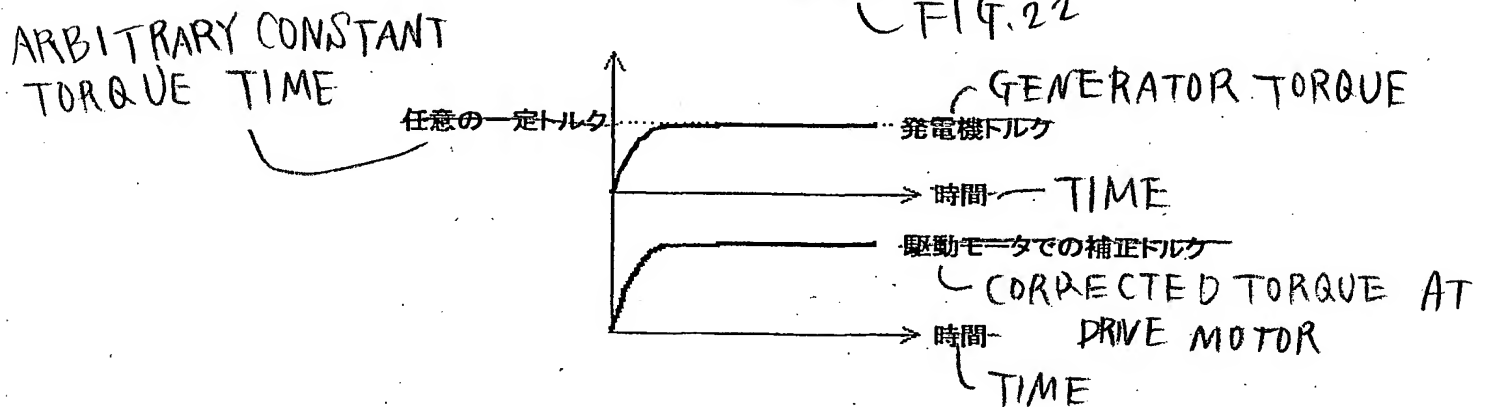


図23 FIG. 23

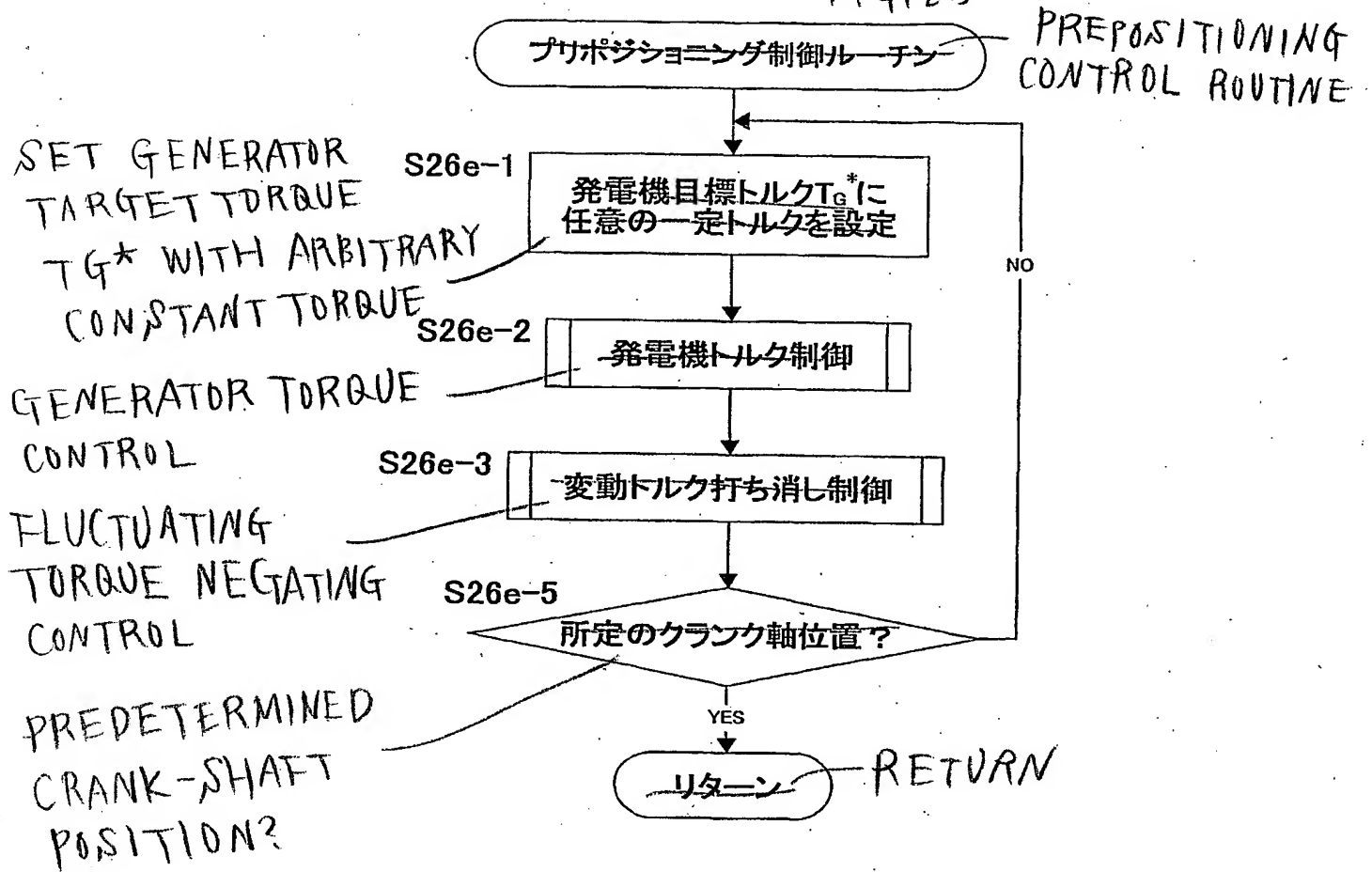


図24 FIG. 24

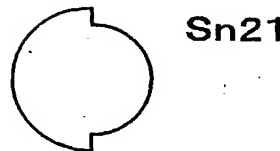


図25 FIG. 25

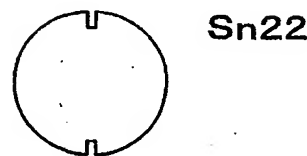


図26

FIG. 26

PREPOSITIONING  
CONTROL ROUTINE

プリポジショニング制御ルーチン

S26e-6

クランク軸位置 $\theta$ の入力INPUT CRANK-SHAFT  
POSITION  $\theta$ 

S26e-7

時間 $t$ 演算CALCULATE TIME  $t$ 

S26e-1

発電機目標トルク $T_g^*$ に  
任意の一定トルクを設定SET GENERATOR  
TARGET TORQUE  
 $T_g^*$  WITH ARBITRARY  
CONSTANT TORQUE

S26e-2

発電機トルク制御

GENERATOR  
TORQUE CONTROL

S26e-3

変動トルク打ち消し制御

FLUCTUATING  
TORQUE NEGATING  
CONTROL

S26e-8

時間 $t$ 経過?TIME  $t$  ELAPSED?

YES

リターン

RETURN

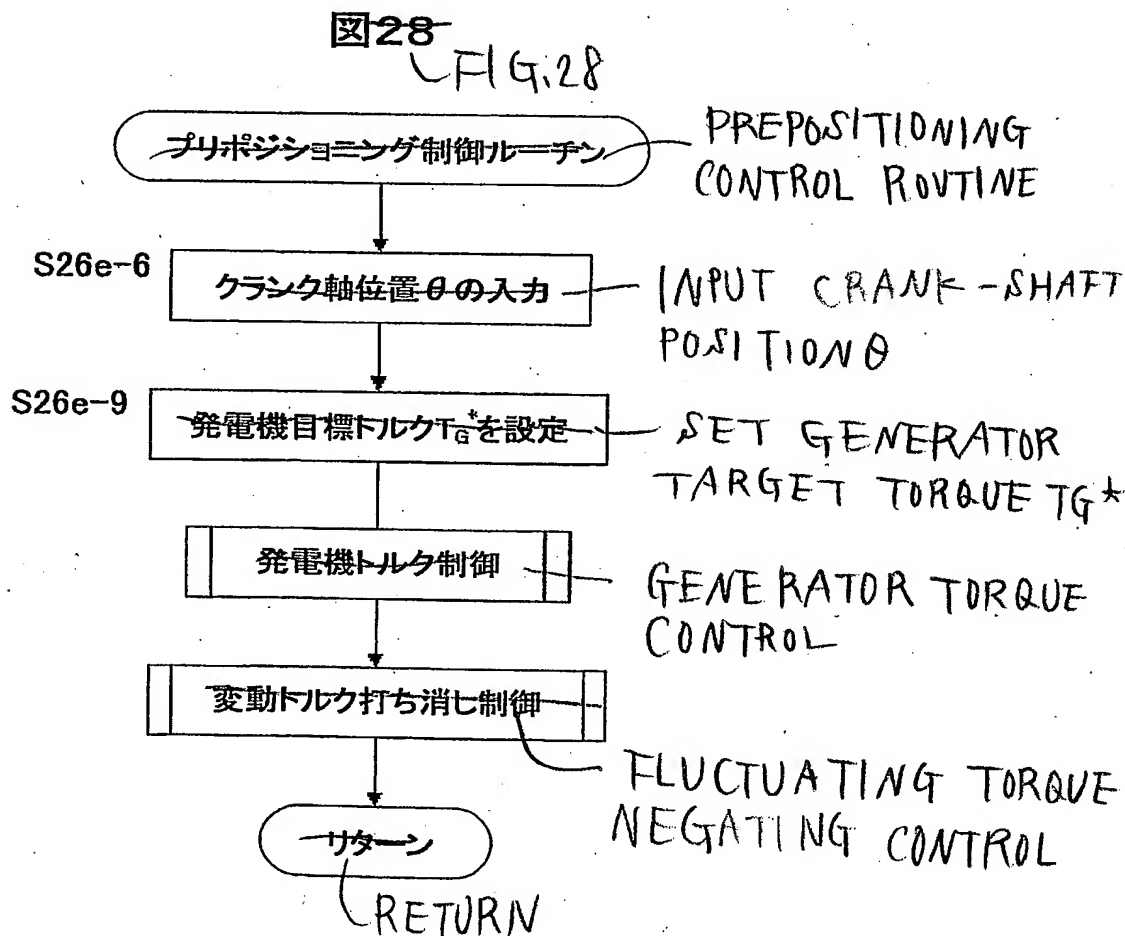
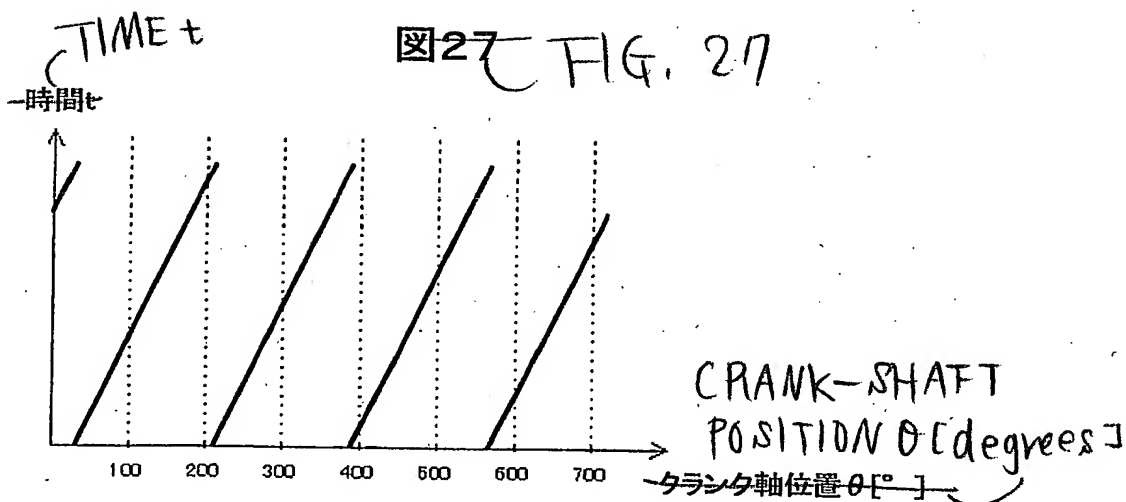
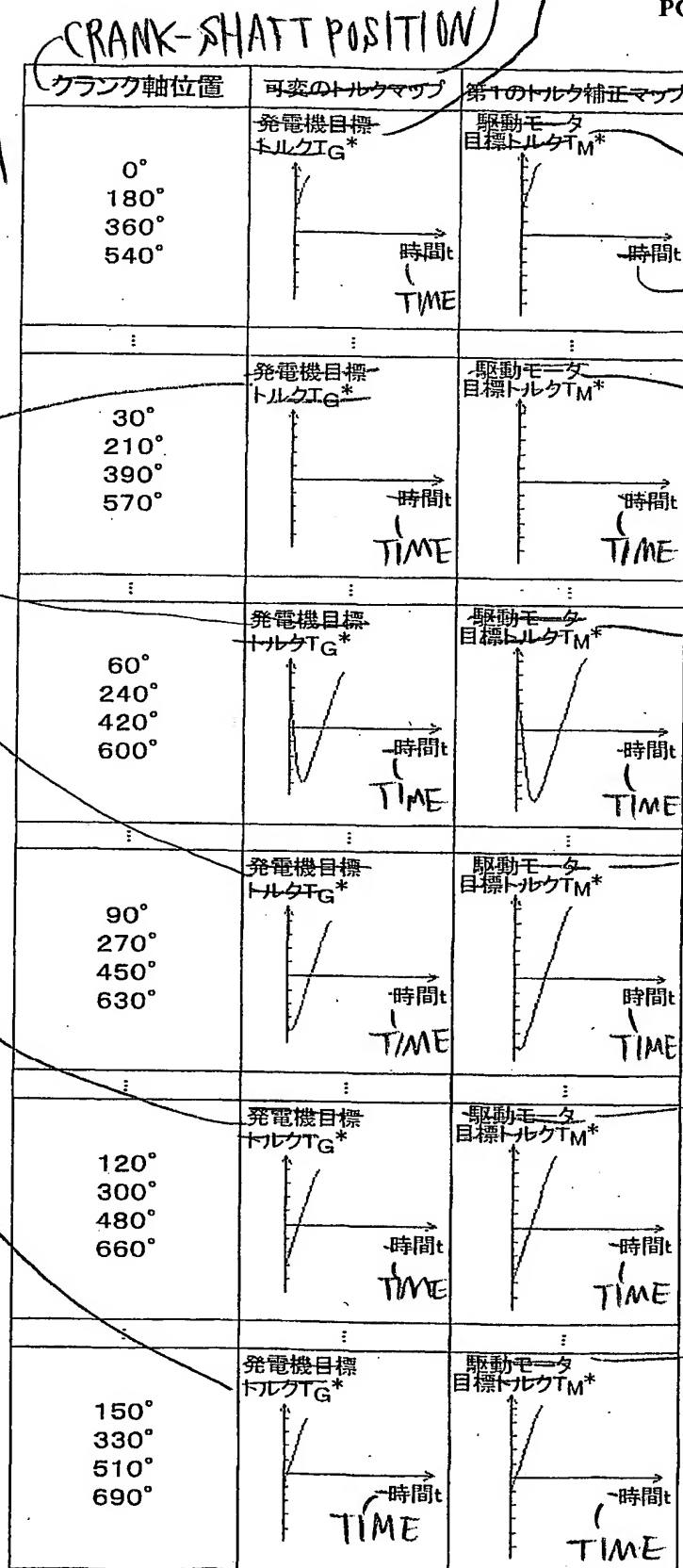


図29

(FIG. 29)



FIRST TORQUE  
CORRECTION MAP  
DRIVE MOTOR  
TARGET TORQUE

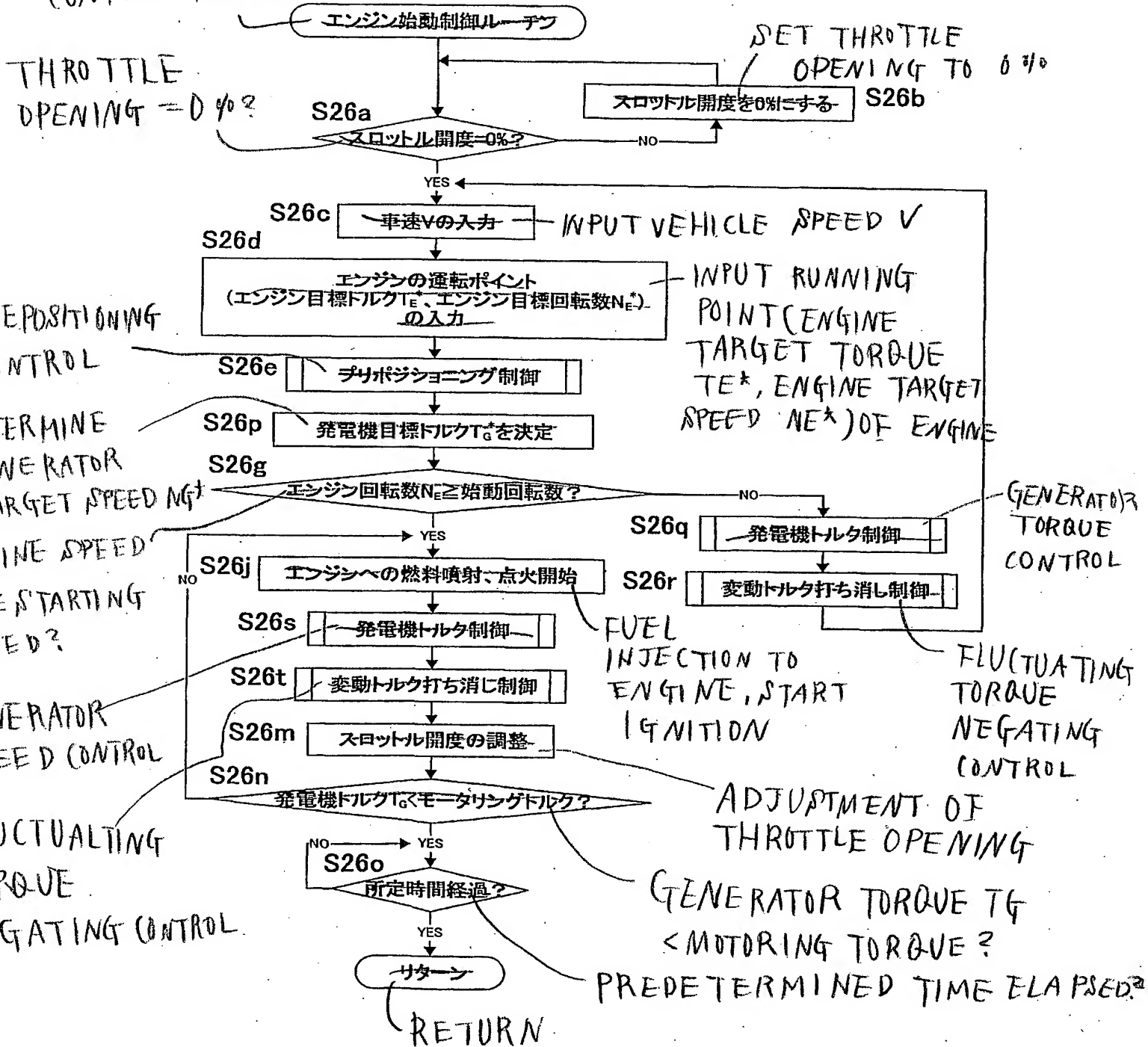
TIME

DRIVE MOTOR  
TARGET TORQUE

VARIABLE  
TORQUE  
MAP

# ENGINE START CONTROL ROUTINE

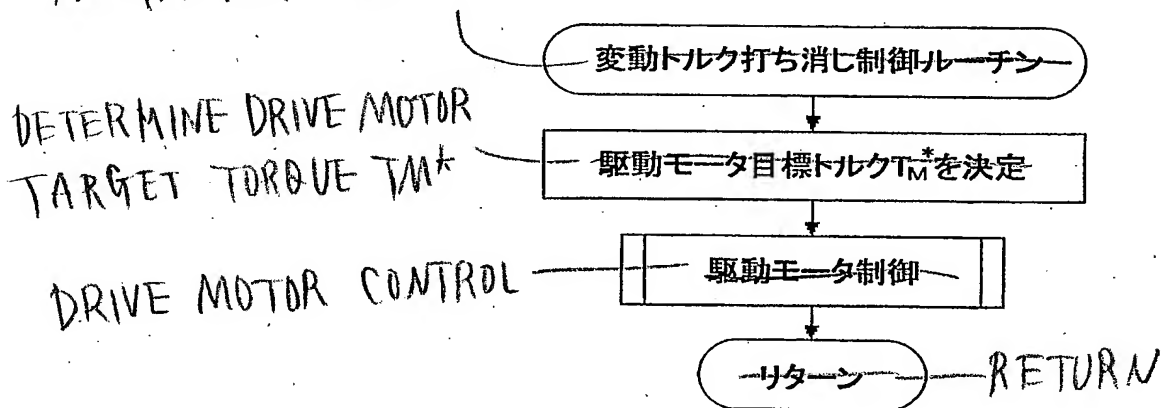
図30 - FIG. 30





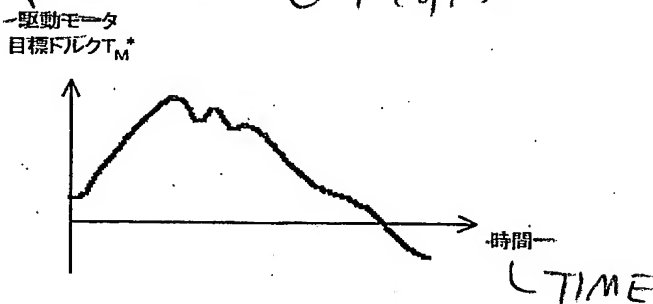
FLUCTUATING TORQUE  
NEGATING CONTROL ROUTINE

FIG. 31  
図31



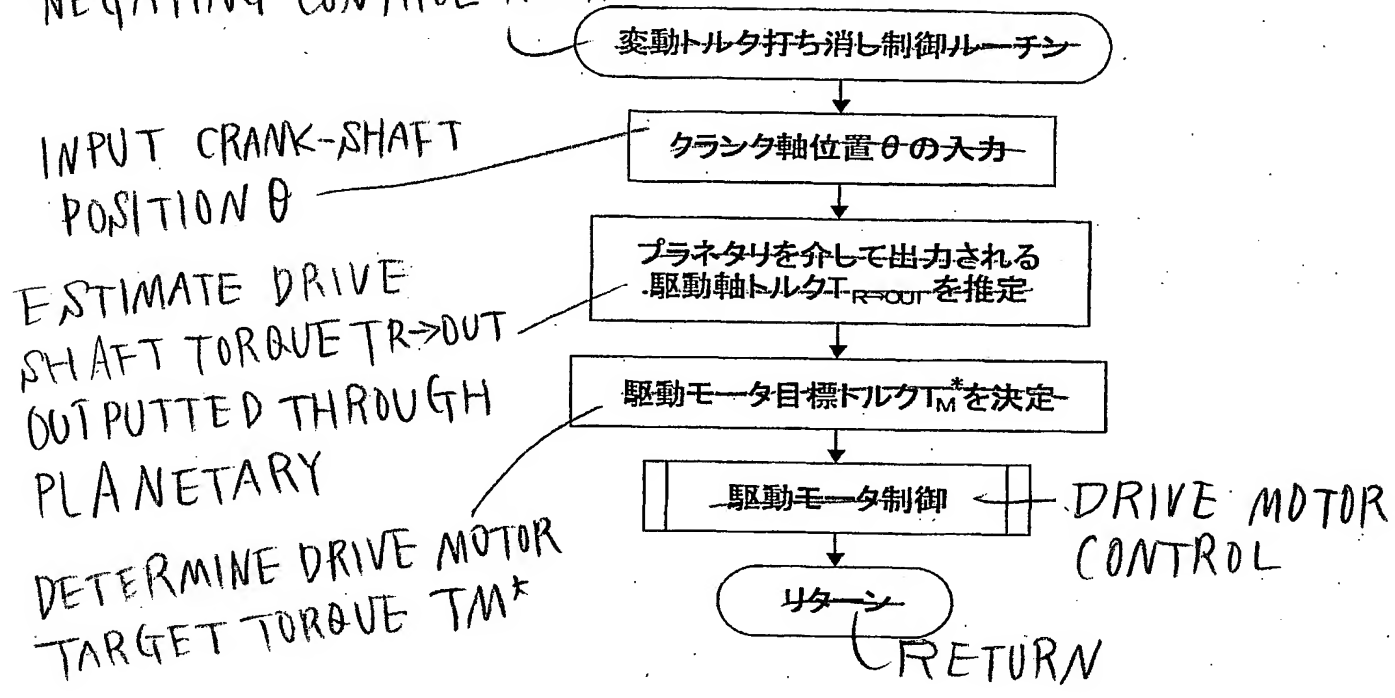
DRIVE MOTOR  
TARGET TORQUE  $T_M^*$

図32 FIG. 32



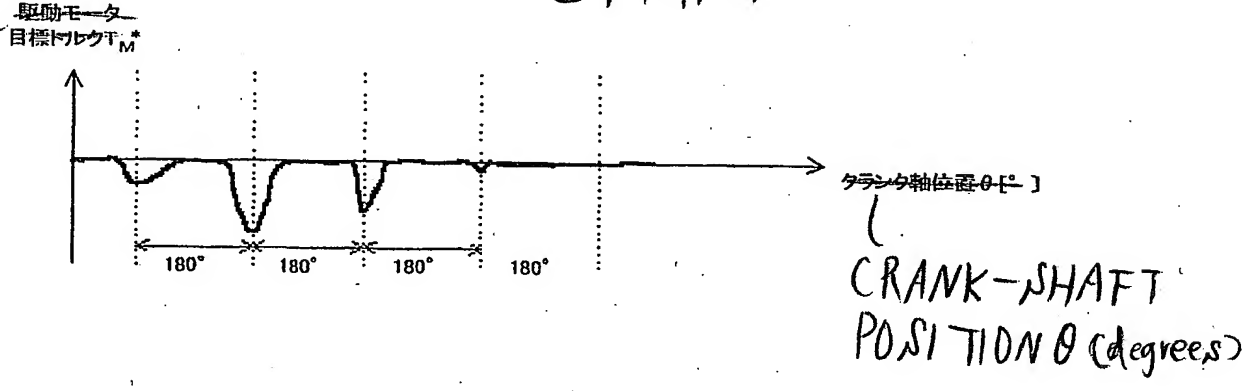
# FLUCTUATING TORQUE NEGATING CONTROL ROUTINE

図33 FIG. 33



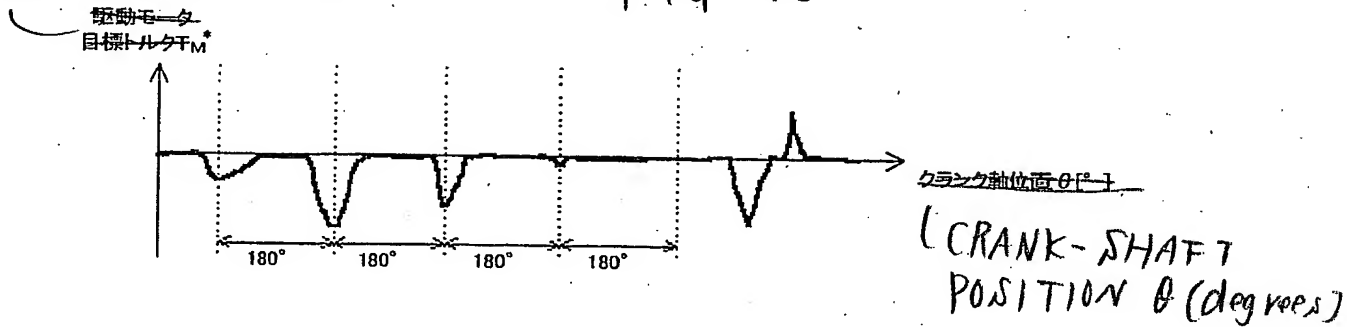
## DRIVE MOTOR TARGET TORQUE $T_M^*$

図34 FIG. 34



DRIVE MOTOR  
TARGET TORQUE  $T_M^*$

図35  
FIG. 35

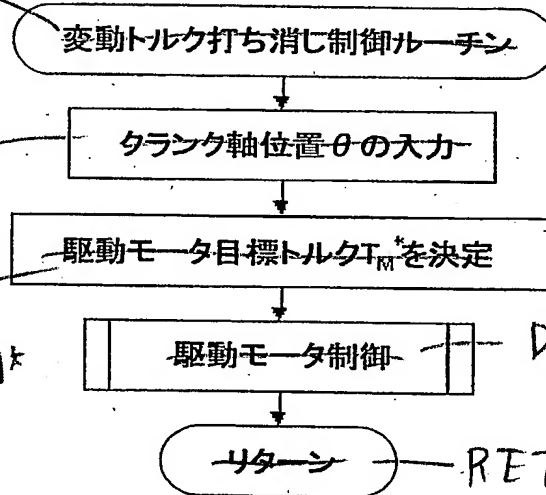


FLUCTUATING  
TORQUE NEGATING  
CONTROL ROUTINE

図36  
FIG. 36

INPUT CRANK-SHAFT  
POSITION  $\theta$

DETERMINE DRIVE  
MOTOR TARGET TORQUE  $T_M^*$



DRIVE MOTOR CONTROL

DRIVE MOTOR TARGET TORQUE  $T_M^*$

図37  
FIG. 37

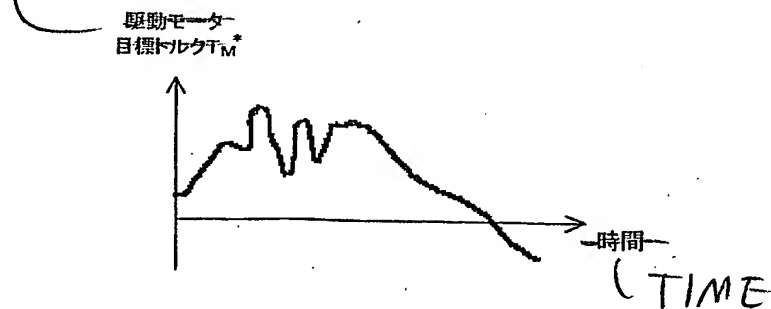


図38

FIG. 38

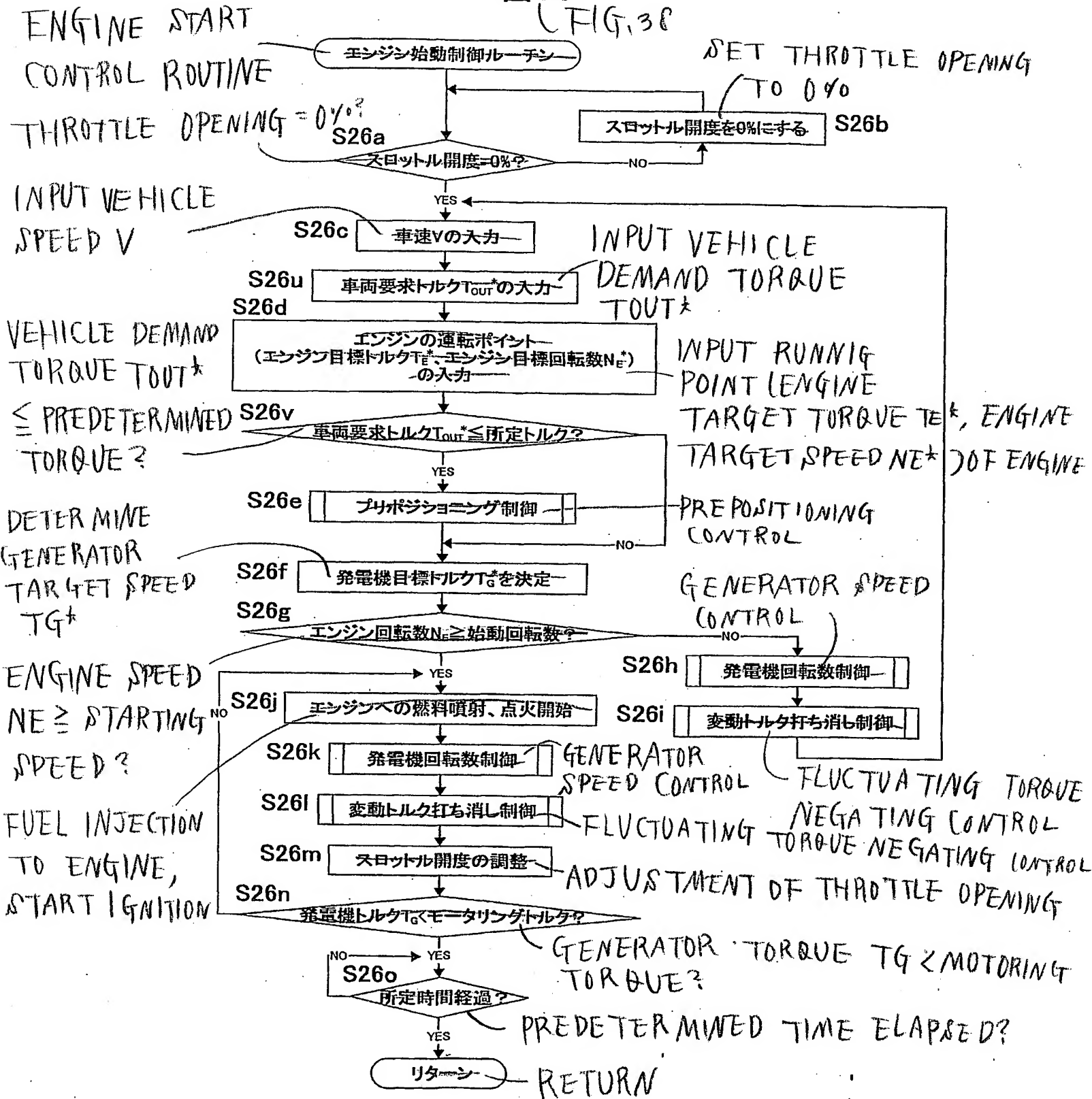
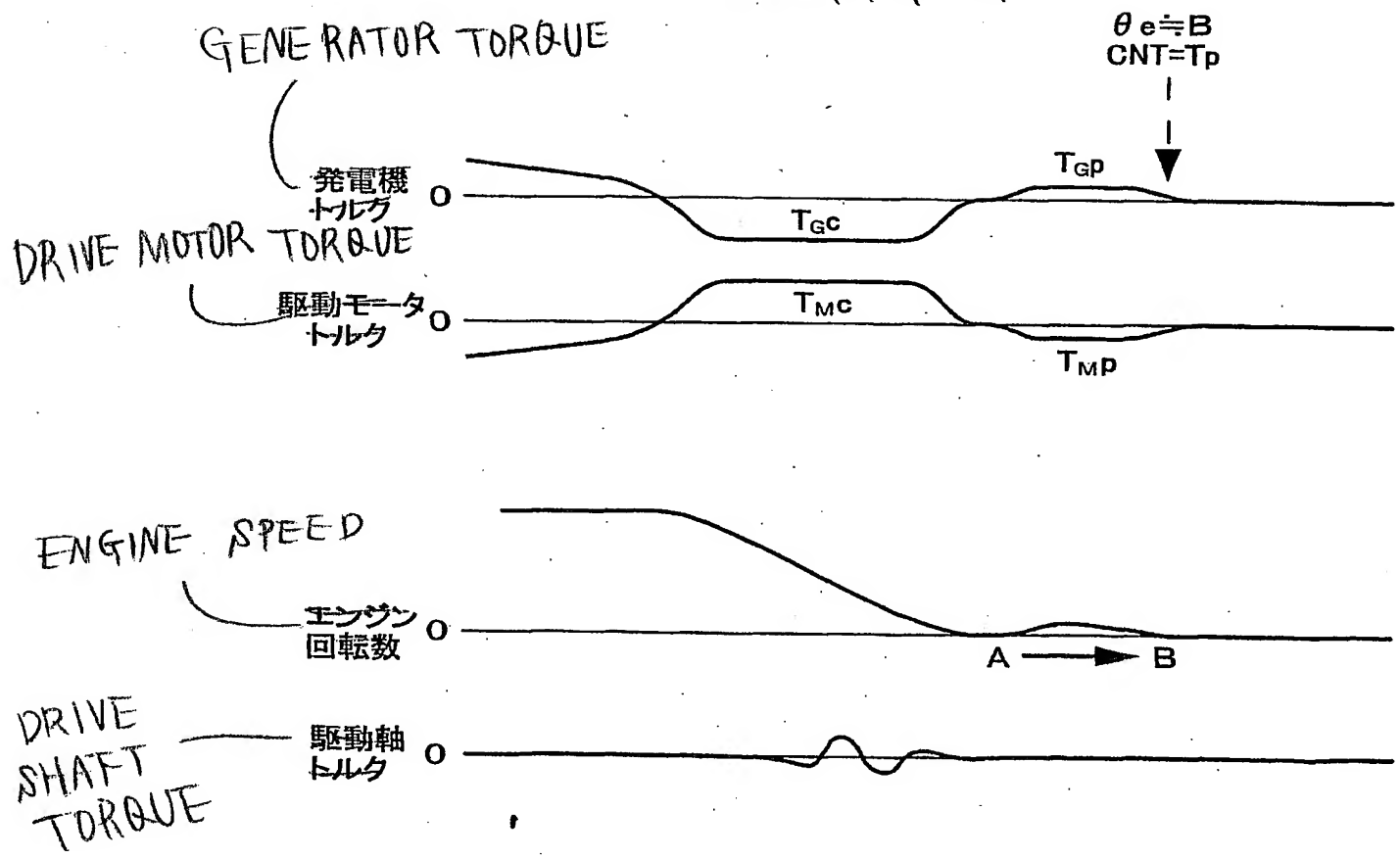


図39

FIG. 39

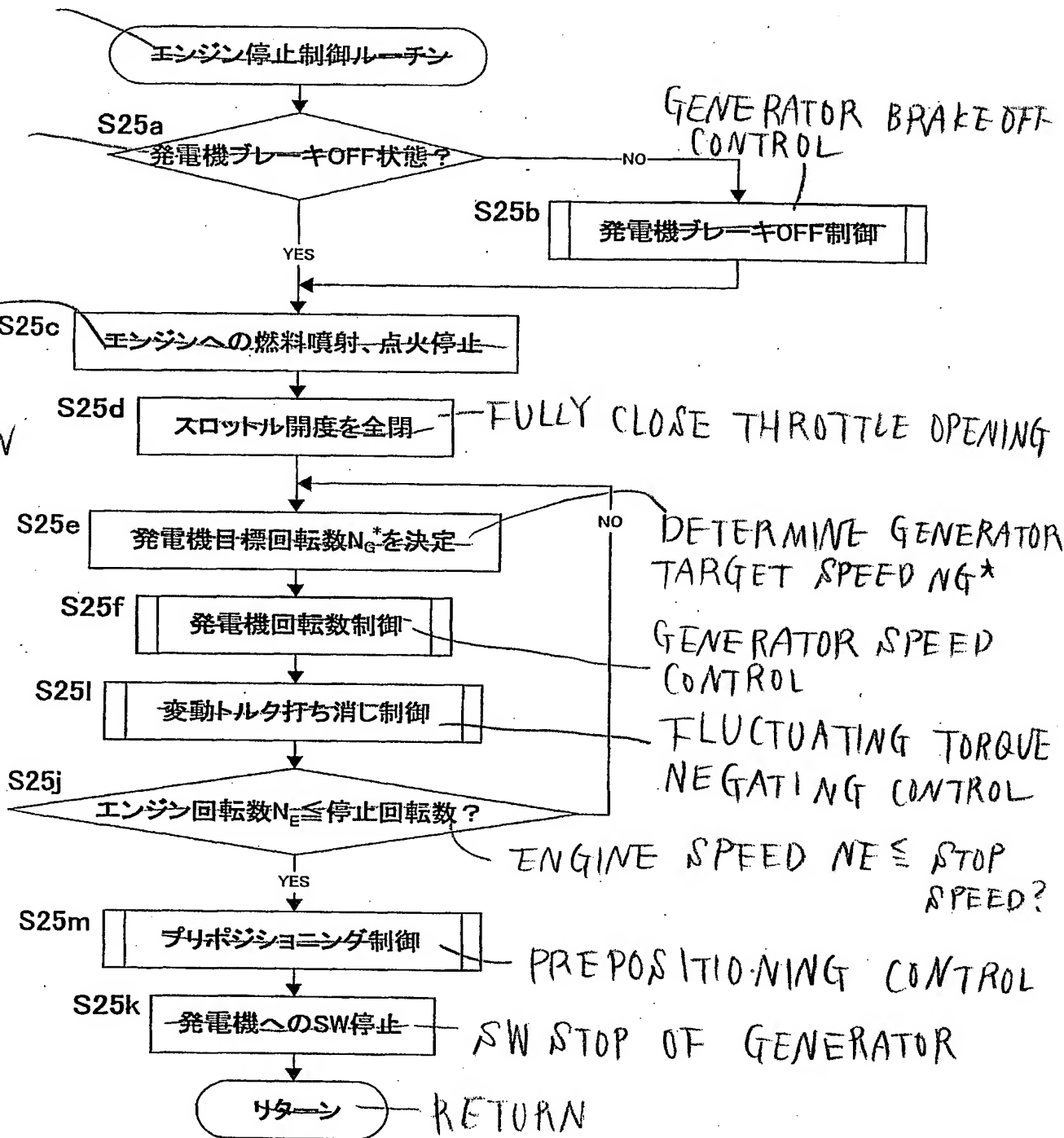


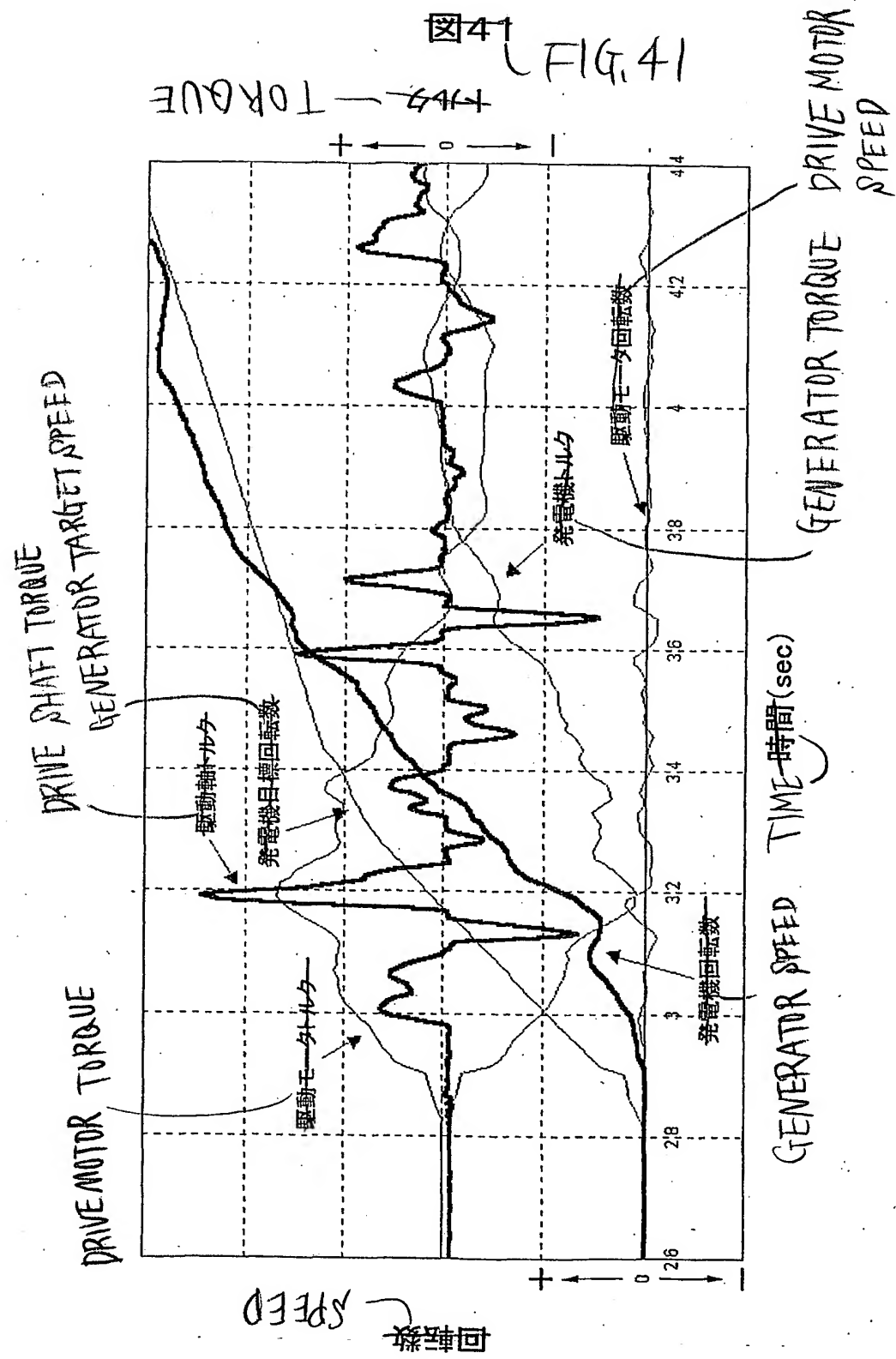
# ENGINE STOP CONTROL ROUTINE

図40 FIG. 40

GENERATOR BRAKE OFF STATE?

STOP FUEL INJECTION TO ENGINE, STOP IGNITION





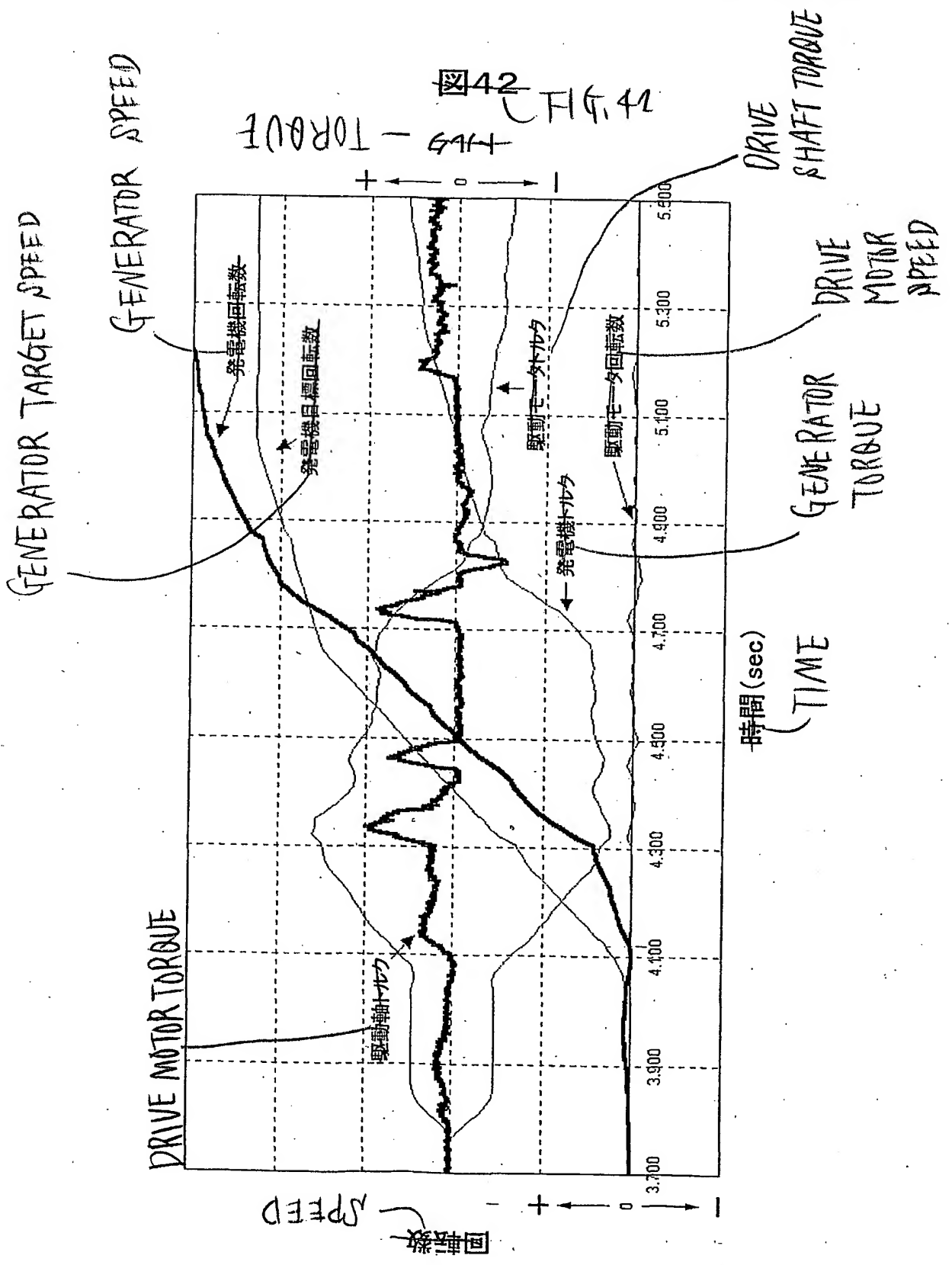




図43 FIG. 43

トルク

